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1985
South Dakota
Motor Vehicle Traffic Accident Summary

Prepared By
Department of Commerce and Regulation
Highway Safety Program and
Department of Transportation
Accident Records Section

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Governor

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I. INTRODUCTION

The South Dakota Motor Vehicle Accident Summary was developed to provide an overview of the South Dakota traffic accident picture, as well as make frequently requested information available. Information from 1985 comprises the major portion of the book; however, basic historic trends are also provided for reference.

The Motor Vehicle Accident Summary is divided into two main sections, Historical Trends and 1985 Motor Vehicle Accident Profile. The Historical Trend section provides information on alcohol involvement in motor vehicle crashes and results of South Dakota's efforts to combat the drinking driver. This section also provides data on restraint usage and accident trends. The 1985 Accident Profile section details the accident picture for 1985; as well as a glossary of terms.

The majority of the information in this book is provided by the Accident Records Section within the Department of Transportation. State law requires an accident report be filed for each motor vehicle traffic accident resulting in the death or injury of a person or accumulated property damage of $400 or more. Law enforcement agencies provide the accident reports to Accident Records. These reports are available to the public for a fee of two (2) dollars.

Examples of reports available through Accident Records are:

STANDARD REPORTS - These reports provide the user with a standard set of summary information for a preselected subset of all accidents, e.g., all accidents involving a drinking driver.

PLOT MAPS - These maps supply the user with a graphic display on which the location of each accident in a given geographic area has been plotted on transparent paper and scaled to overlay maps provided by the Department of Transportation.

SPECIAL REQUESTS - Special requests are answered using several computer packages, one of which is an on-line query system which provides almost immediate response to requests of a very specific nature.

For additional information or copies write or call:

Accident Records Section
118 West Capitol Avenue
Pierre, SD 57501-2080
Phone: (605)773-3868

OR

Office of Highway Safety
118 West Capitol Avenue
Pierre, SD 57501-2080
Phone: (605)773-3675

SOUTH DAKOTA

STATISTICAL SUMMARY

1985

NUMBER OF REPORTED MOTOR VEHICLE TRAFFIC ACCIDENTS: 15,431

NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENT INJURIES: 6,239

NUMBER OF MOTOR VEHICLE TRAFFIC ACCIDENT FATALITIES: 130

PERCENT OF DRIVERS IN FATAL ACCIDENTS WHO HAD BEEN DRINKING: 38.2%

NUMBER KILLED IN ALCOHOL-RELATED ACCIDENTS: 69

NUMBER INJURED IN ALCOHOL-RELATED ACCIDENTS: 1,280

NUMBER OF PEDESTRIANS KILLED: 8

NUMBER OF MOTORCYCLISTS KILLED: 15

NUMBER OF BICYCLISTS KILLED: 3

PERCENT OF LICENSED DRIVERS UNDER 25: 21%

PERCENT OF ACCIDENT-INVOLVED SPEEDING DRIVERS UNDER 25: 56%

PERCENT OF ACCIDENT-INVOLVED DRINKING DRIVERS UNDER 25: 50%

NUMBER OF DWI CONVICTIONS: 5,166

NUMBER OF FELONY DWI STATE PENITENTIARY INMATES: 69

SEATBELT USE RATE OF ACCIDENT-INVOLVED DRIVERS: 11.1%

HELMET USE RATE OF ACCIDENT-INVOLVED MOTORCYCLISTS: 27.7%

NUMBER OF UNRESTRAINED CHILDREN UNDER 5 YEARS OF AGE KILLED IN MOTOR VEHICLE ACCIDENTS: 5

NUMBER OF PROPERLY RESTRAINED CHILDREN UNDER 5 YEARS OF AGE KILLED IN MOTOR VEHICLE ACCIDENTS: 0

AVERAGE TRAVEL SPEED ON SOUTH DAKOTA HIGHWAYS: 57.3 MPH

PERCENT OF MOTORISTS EXCEEDING 55 MPH: 49.4%

II. HISTORICAL TRENDS

Motor Vehicle Accidents

The fatality rate per 100 million vehicle miles traveled from 1975-1985 for South Dakota, states surrounding South Dakota and the nation is shown in TABLE 2-1. South Dakota's rate, the national rate and the rate of those states bordering South Dakota have all shown a decline over the last ten years. FIGURE 2-1 compares South Dakota with the national rate and two comparable rural states, North Dakota and Wyoming.

TABLE 2-1
FATALITY RATE COMPARISON
1975-1985

State	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
South Dakota	4.1	3.7	3.3	3.8	4.2	3.2	2.7	2.7	2.2	2.0
Iowa	4.3	3.4	3.3	3.5	3.4	3.3	2.5	2.6	2.1	2.3
Minnesota	3.0	3.0	3.4	3.0	3.0	2.7	2.0	1.8	1.8	1.8
Montana	4.9	4.9	3.9	5.0	4.9	4.8	3.8	4.0	3.2	3.1
Nebraska	3.4	2.9	2.8	2.8	3.5	3.3	2.3	2.2	2.4	2.0
North Dakota	3.8	3.6	3.5	2.5	2.9	3.0	2.8	2.2	1.9	1.6
Wyoming	6.3	5.6	5.2	5.2	5.2	5.4	3.9	3.4	3.1	2.9
National	3.2	3.3	3.3	3.3	3.4	3.2	2.8	2.6	2.6	2.5

Note: Fatality Rate is the number of traffic fatalities per 100 million vehicle miles traveled.

Source: Department of Transportation:Accident Records

TABLE 2-2 provides a yearly comparison of South Dakota's motor vehicle traffic accidents from 1960 through 1985. Any comparison of motor vehicle accidents must be made with caution due to the changes in the definition of a reportable accident. For example, in the late 1970's the definition of a fatality caused by a motor vehicle accident was changed from the death occurring up to one year after the accident to occurring within 30 days after the accident. Although this would not change the fact that the number and rate of fatalities has shown a steady decline, the decline in the last few years would not have been as much. There does not appear to be a single reason why there are fewer fatalities; however, the national 55 mph speed limit law initiated in 1974 and the increased efforts in the drinking driving area in 1981 have probably had the most impact. Other factors include improvements in the highways, safer vehicles, and traffic enforcement efforts. Also of importance is the fact that both the number of registered motor vehicles and the vehicle miles traveled continue to increase.

FIGURE 2-1 FATALITY RATE COMPARISON

1976 - 1985

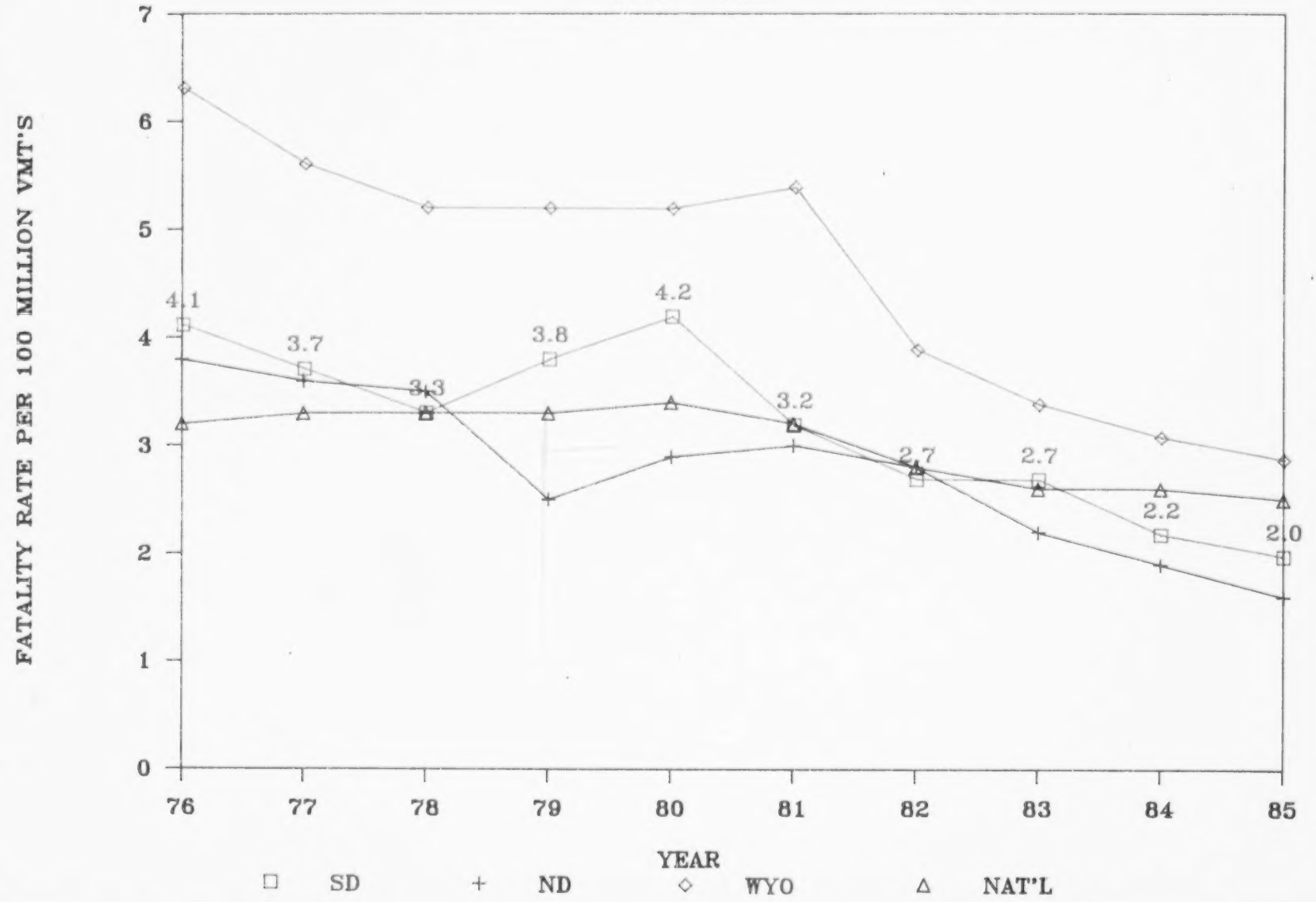


TABLE 2-2
SOUTH DAKOTA YEARLY COMPARISON
OF MOTOR VEHICLE TRAFFIC FATALITIES, INJURIES,
ACCIDENTS, MILES TRAVELED, & REGISTERED MOTOR VEHICLES

Year	Fatalities	Rate[1]	Injuries	Total Accd.	Fatal Accd.	Injury Accd.	PDO Accd.	Miles Traveled +(000,000)	Registered Motor Vehicles +(000)
1960	233	6.94	3,656	7,187	191	2,121	4,875	3,359	351
1961	228	6.75	3,848	7,281	184	2,313	4,784	3,379	361
1962	246	6.77	4,248	8,805	191	2,592	6,022	3,631	377
1963	220	5.83	4,123	8,874	185	2,530	6,159	3,776	386
1964	270	7.03	4,569	9,349	211	2,816	6,322	3,839	387
1965	244	6.13	4,685	10,015	194	2,880	6,941	3,983	396
1966	265	6.50	5,072	10,821	205	3,087	7,529	4,075	402
1967	224	5.41	5,286	12,154	183	3,250	8,721	4,142	407
1968	255	5.91	5,612	14,061	215	3,396	10,450	4,313	409
1969	296	6.79	5,921	16,565	219	3,584	12,762	4,361	422
1970	238	5.12	5,492	16,165	189	3,395	12,581	4,648	427
1971	262	5.36	6,705	16,995	210	4,152	12,633	4,884	444
1972	294	5.83	6,718	17,883	235	4,267	13,381	5,039	467
1973	286	5.57	6,774	14,985[2]	228	4,321	10,436	5,136	494
1974	229	4.47	6,211	11,727	203	4,077	7,447	5,126	519
1975	198	3.82	6,769	15,146[3]	163	4,398	10,585	5,186	533
1976	224	4.07	7,423	15,755	188	4,840	10,727	5,503	554
1977	211	3.67	7,603	18,020	180	5,013	12,827	5,754	575
1978	194	3.33	7,861	18,085[4]	168	5,263	12,654	5,830	599
1979	211	3.76	7,189	16,059	169	4,826	11,064	5,614	616
1980	228	4.18	7,147	14,845	188	4,770	9,887	5,456	622
1981	177	3.17	6,771	14,375	162	4,614	9,599	5,582	637
1982	148	2.68	6,174	14,605	129	4,192	10,284	5,528	640
1983	175	2.73	6,287	14,971	147	4,175	10,649	6,406[5]	655
1984	143	2.24	6,158	15,093	132	4,297	10,664	6,394	669
1985	130	2.02	6,239	15,431	109	4,228	11,094	6,443	674

Source: Department of Transportation:Accident Records

[1]Number of fatalities per 100 million vehicle miles traveled.

[2]Prior to July 1, 1973 a reportable motor vehicle traffic accident was defined as one involving a death, injury or property damage of $100 or more to one person. July 1, 1973 the PDO amount changed to $250.

[3]January 1, 1975 the definition of a reportable motor vehicle traffic accident was revised as follows: an accident involving a death, injury, or accumulated property damage of $250 or more.

[4]July 1, 1978 the definition of a reportable motor vehicle traffic accident was revised as follows: an accident involving a death, injury or accumulated property damage of $400 or more.

[5]1983 the formula for computing VMTs was adjusted, resulting in an approximate 9.5% increase in annual VMTs.

Alcohol Involvement

Alcohol continues to be a significant factor in motor vehicle accidents, especially the serious crashes involving death and injuries (see TABLE 2-3 and FIGURES 2-2 and 2-3). In 1985, half of the motor vehicle fatalities and one out of five injuries were the result of an alcohol-related crash.

TABLE 2-3
ALCOHOL INVOLVED ACCIDENTS AS PERCENT OF ALL ACCIDENTS

	1979	1980	1981	1982	1983	1984	1985
Total Accidents	15.2 (2438)	17.4 (2588)	18.0 (2591)	14.0 (2044)	13.6 (2029)	13.2 (1993)	11.2 (1728)
Fatal Accidents	55.6 (94)	55.9 (105)	61.7 (100)	59.7 (77)	49.0 (72)	53.8 (71)	51.4 (56)
Injury Accidents	23.2 (1122)	27.0 (1286)	27.4 (1266)	22.2 (930)	22.4 (935)	20.8 (894)	19.2 (810)
PDO Accidents	11.0 (1222)	12.1 (1197)	12.8 (1225)	10.1 (1037)	9.6 (1022)	9.6 (1028)	7.8 (862)
Fatalities	58.3 (123)	54.4 (124)	62.1 (110)	58.1 (86)	50.9 (89)	53.1 (76)	53.1 (69)
Injuries	25.7 (1845)	29.3 (2094)	29.0 (1964)	23.5 (1453)	24.3 (1528)	22.3 (1371)	20.5 (1280)

NOTE: 1979-1982: Alcohol involvement for PDO and Injury Accidents is based on an indication of alcohol use as reported by the investigating officer.
Alcohol involvement for Fatal Accidents is based upon a positive BAC result and/or indication of alcohol use as reported by the investigating officer.
1983-1985: All Accidents - At least one driver, pedestrian or bicycle driver had been drinking in the opinion of the investigating officer.

Source: Department of Transportation:Accident Records

FIGURE 2-2 1985 TRAFFIC FATALITIES

Alcohol Related vs Non Alcohol Related

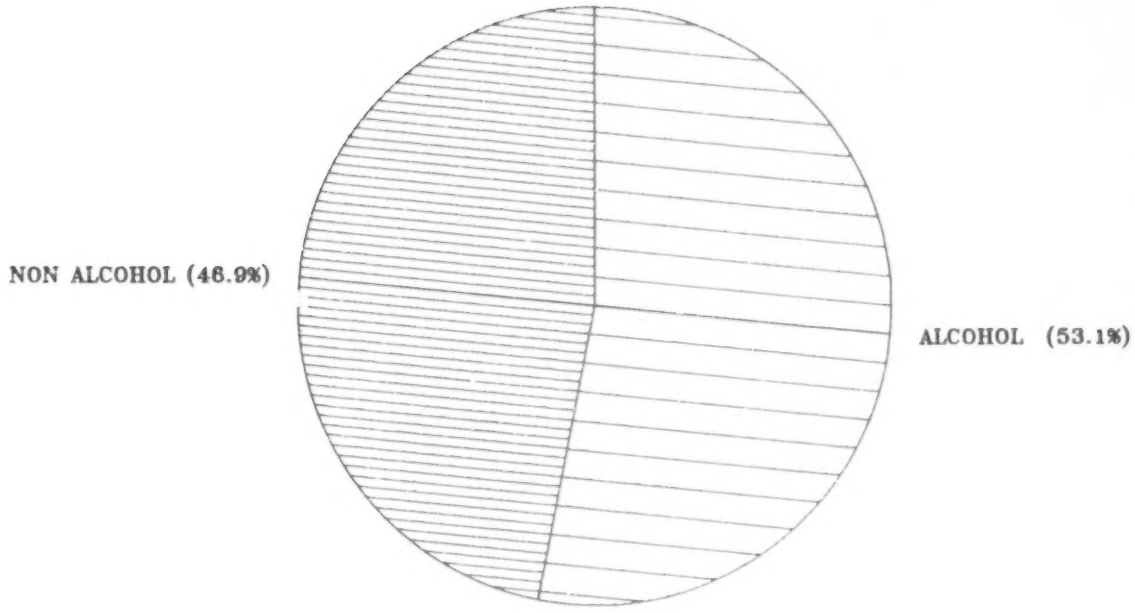
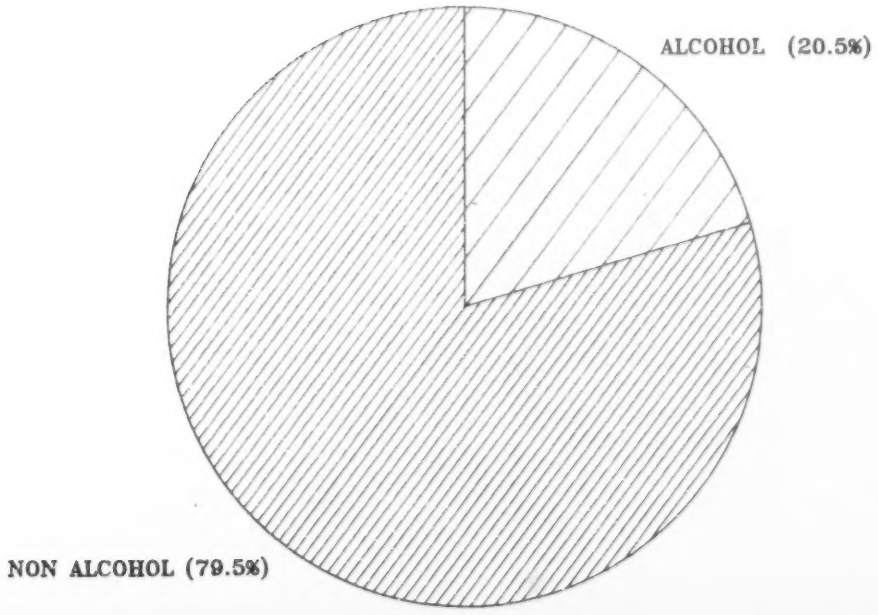


FIGURE 2-3 1985 TRAFFIC INJURIES

Alcohol Related vs Non Alcohol Related



The State of South Dakota initiated a statewide effort during 1981 to increase the DWI enforcement and public awareness efforts. The numbers of persons killed and injured in alcohol-related crashes have declined since 1981. The following crash and arrest data is presented to quantify the reduction of alcohol-related fatal and injury crashes and to compare that reduction to the nonalcohol-related crash experience (see TABLE 2-4).

TABLE 2-4
ACCIDENT AND ARREST ACTIVITY
1979 - 1985

	FATAL ACCIDENTS		FATAL & INJURY ACCIDENTS		
	ALCOHOL RELATED	NONALCOHOL RELATED	ALCOHOL RELATED	NONALCOHOL RELATED	DWI ARRESTS
1979	94	75	1216	3779	4136
1980	105	83	1391	3567	4151
1981	100	62	1366	3410	5068
1982	77	52	1007	3314	6842
1983	72	75	1007	3315	9840
1984	71	61	965	3464	9972
1985	56	53	866	3471	9063

Source: Department of Transportation:Accident Records

FIGURE 2-4 presents the annual counts of DWI arrests, alcohol-related fatal and injury accidents, and nonalcohol-related fatal and injury accidents for 1979 to 1985. FIGURE 2-5 presents the alcohol-related and nonalcohol-related fatal accident experience.

To facilitate comparison of 1985 accident and arrest experience, a baseline 3-year average (1979-81) and the previous 3-year average (1982-84) are presented in TABLE 2-5. Additionally, TABLE 2-5 includes the percentage change in 1985 accident and arrest levels from the baseline 3-year average, the previous 3-year average, and the prior year.

There were 56 alcohol-related fatal accidents during 1985, which compares to 71 in 1984. The previous three-year average was 73 and the baseline average was 100. Alcohol-related fatal crashes were down 24 percent when compared to the previous three-year average, while nonalcohol-related fatal accidents declined 15 percent the same period.

There were 866 alcohol-related injury accidents during 1985, which compares to 965 in 1984. The previous three-year average was 993 or a 13 percent decrease in 1985. Nonalcohol-related injury accidents increased three percent in 1985.

There were an estimated 9,063 DWI arrests in 1985. This level is up slightly (2%) from the previous three-year average, but down nine percent from 1984.

FIGURE 2-4 F&I ACC AND DWI'S

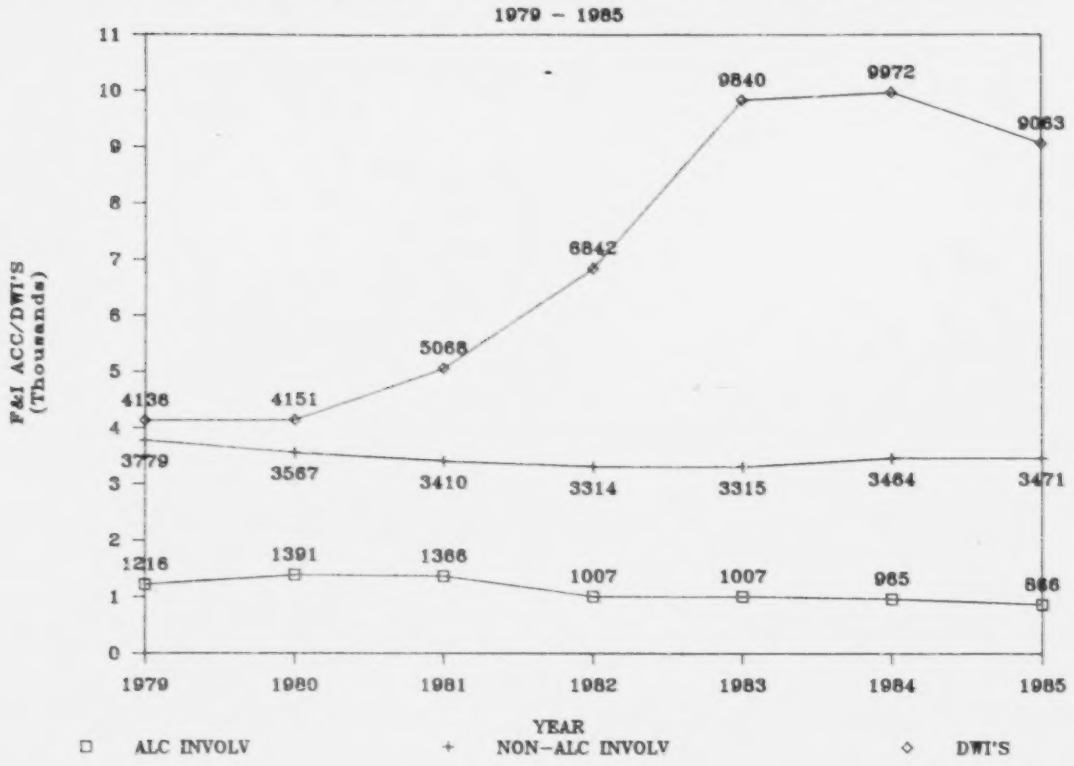


FIGURE 2-5 FATAL ACCIDENTS

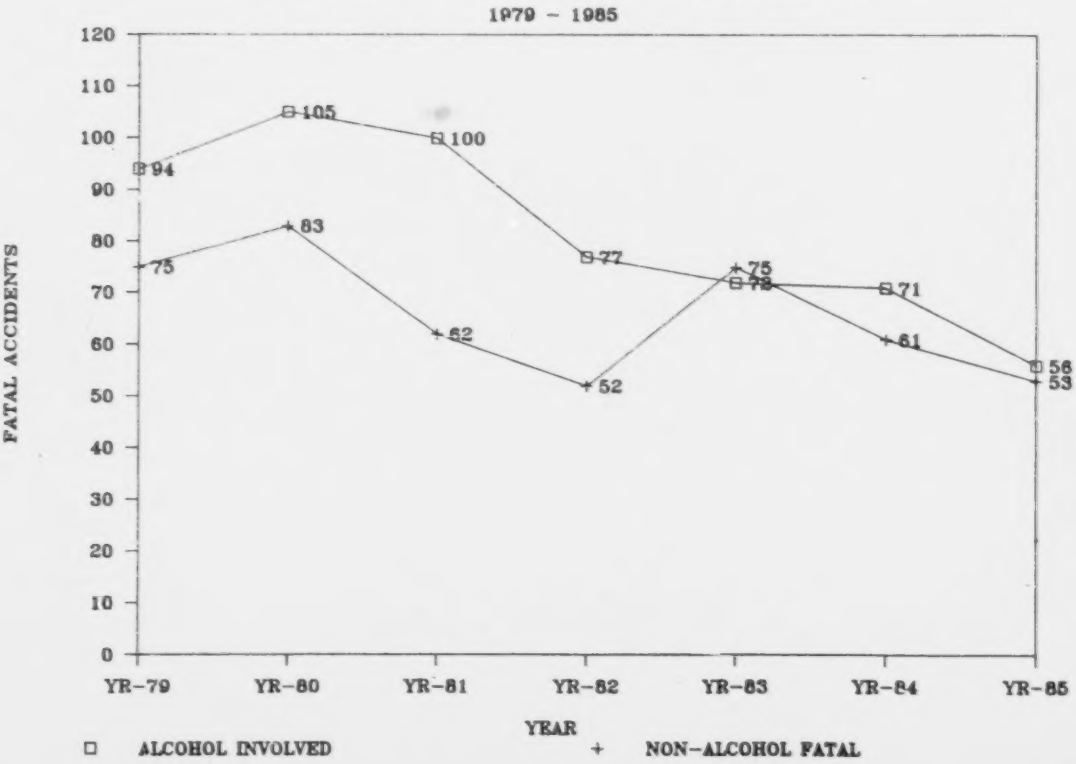


TABLE 2-5
COMPARISON OF ACCIDENT & ARREST ACTIVITY
(1979 - 1985)

	BASELINE 3-YEAR AVG. (1979-81)	PREVIOUS 3-YEAR AVG. (1982-84)	1984	1985	PERCENTAGE CHANGE OF 1985 LEVELS COMPARED TO: BASELINE 3-YEAR AVG.	PREVIOUS 3-YEAR AVG.	1984
Fatal Accidents							
Alcohol-Related	99.7	73.3	71	56	-44%	-24%	-21%
Nonalcohol-Related	73.3	62.7	61	53	-28%	-15%	-13%
Fatal & Injury Accidents							
Alcohol-Related	1324.3	993.0	965	866	-35%	-13%	-10%
Nonalcohol-Related	3585.3	3364.3	3464	3471	-3%	+3%	
DWI's	4451.7	8884.7	9972	9063	+104%	+2%	-9%

Restraint Usage

The use of safety equipment is reported on all motor vehicle drivers in an accident and only on those passengers who are injured. During 1985, only 11 percent of the motor vehicle drivers in accidents were using safety restraints (see TABLE 2-6). Fifty-two drivers of motor vehicles were killed while not using any safety restraint, while one driver was killed while using some type of safety restraint (does not include drivers of motorcycles, mopeds and snowmobiles). Over 89 percent (2827) of the injured drivers were not using safety restraints.

TABLE 2-6
SAFETY RESTRAINT USAGE
ACCIDENT-INVOLVED DRIVERS
1983-1985

DRIVER AGE	USAGE RATE 1983	1984	1985
14-15	3.2%	4.6%	4.2%
16-17	2.0%	3.7%	4.8%
18-20	4.3%	5.0%	7.0%
21-24	6.4%	7.7%	10.9%
25-34	8.5%	12.1%	14.3%
35-44	8.3%	11.7%	14.4%
45-54	8.7%	11.1%	13.1%
55-64	6.9%	10.1%	12.2%
65 & Over	5.8%	8.4%	9.7%
Total	6.5% (1330)	8.9% (1805)	11.1% (2363)

Source: Department of Transportation:Accident Records

The increased usage of safety restraints by 1984-85 accident-involved drivers is an indicator that usage is increasing in South Dakota across all age groups.

Motor vehicle occupants from birth to four years of age accounted for five fatalities during 1985, which compares to two fatalities in 1984 and the previous four-year average of 2.5 (see TABLE 2-7). None of the children killed were restrained.

There were 122 children (birth to 4 years) injured in 1985, which compares to 139 in 1984 and the four-year average of 142.5. The restraint usage levels of the injured children increased to 30 percent in 1985 from 20 percent in 1984 and 18 percent in 1983.

TABLE 2-7
FATALITIES & INJURIES TO MOTOR VEHICLE OCCUPANTS
UNDER 5 YEARS OF AGE

YEAR	FATALITIES	SERIOUS INJURY	SLIGHT INJURY	TOTAL (NONFATAL) INJURIES
1981	0	107	44	151
1982	3	85	47	132
1983	5	86	62	148
1984	2	78	61	139
1985	5	74	48	122

Source: Department of Transportation:Accident Records

In 1985, the South Dakota Office of Highway Safety conducted a study of seatbelt use in ten South Dakota cities. Over 17,000 motor vehicle occupants were observed in these communities between April and June of 1985. Seatbelt use varied considerably among the ten cities. The table below lists the cities from highest to lowest seatbelt use rates for all occupants.

TABLE 2-8
RESTRAINT USE FOR ALL OCCUPANTS
1985

City	Rate
Rapid City	19%
Sioux Falls	16%
Isabel	10%
Aberdeen	9%
Vermillion	8%
Yankton	8%
Faulkton	8%
Watertown	6%
Winner	5%
Pierre	4%

For the total sample combined, 10 percent of occupants were wearing seatbelts. Restraint use was slightly higher for drivers (11%) than for passengers (9%), and for females (11%) than for males (9%). People exiting from highways and interstates were more likely to use their seatbelts (15%) than were persons traveling city streets (9%).

One purpose of the study was to measure the level of compliance with the South Dakota child restraint law which mandates use of a safety restraint for children under five years of age. Based upon estimates of the ages of motor vehicle occupants, approximately 10 percent of adults 20 years and older wore their seatbelts, seven percent of children and adolescents from 5-19 years wore seatbelts, and 31 percent of children under five were protected by a child restraint or a seatbelt. Although restraint use for children was significantly higher than other age groups, nearly 70 percent of children under five were still riding without the benefit of safety restraint protection. The level of compliance with the child restraint law varied among the ten cities (see TABLE 2-9 and FIGURE 2-6).

FIGURE 2-6 RESTRAINT USAGE 1985

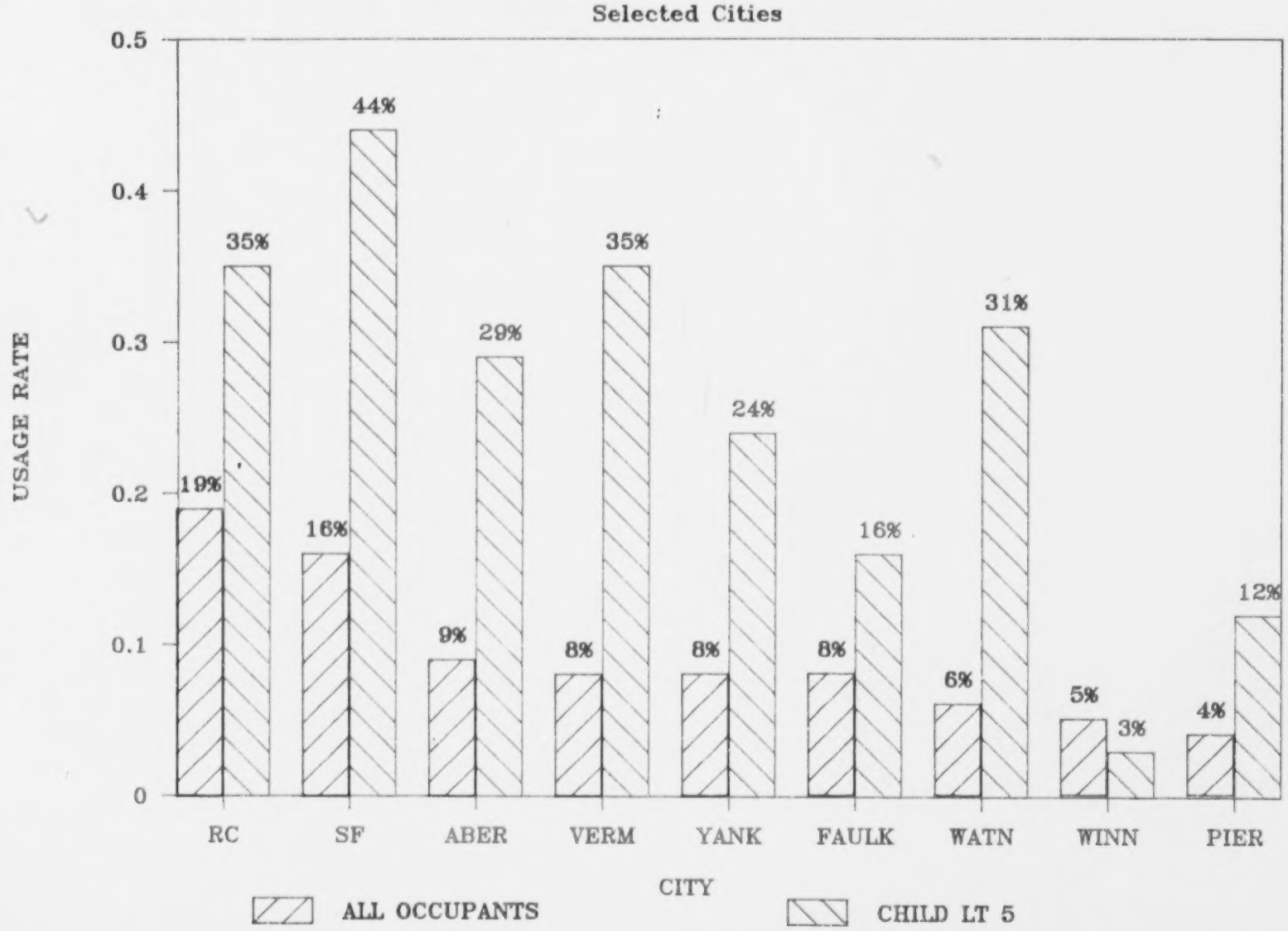


TABLE 2-9
RESTRAINT USE FOR CHILDREN 0-4 YEARS
1985

City	Rate
Sioux Falls	44%
Rapid City	35%
Vermillion	35%
Watertown	31%
Aberdeen	29%
Yankton	24%
Faulkton	16%
Pierre	12%
Winner	3%

The study also investigated whether the South Dakota child restraint law has increased use of safety restraints among children since 1984. Results of surveys conducted in Vermillion and Yankton in 1982 and 1983 were compared to the 1985 survey results. Child restraint use in Vermillion increased from seven percent (1982) to 15 percent (1983) to 35 percent (1985). It is estimated that the child restraint law in combination with a very active community child restraint program has increased child restraint use by 20 percentage points — more than doubling the pre-law rate. Yankton, without a community program, showed an increase of six to 13 percentage points following passage of the law. Usage increased to 24 percent (1985) from 18 percent (1982) and 11 percent (1983) baseline levels.

Cycle And Pedestrian Accidents

The following tables provide a yearly comparison of South Dakota's motorcycle, pedestrian, and bicycle accident injuries and fatalities from 1970 through 1985. Moped accidents are included with motorcycle accidents. There have been no fatal moped accidents recorded in South Dakota and the number of injuries is small. See TABLES 3-2, 3-3 and Pages 47-52 for additional motorcycle, pedestrian, and bicycle accident information.

TABLE 2-10
MOTORCYCLE ACCIDENTS
1970-1985

	Motorcycle Accidents			Motorcyclists		Registered	Licensed
Year	Total	Fatal	Injury	Killed	Injured	Motorcycles	Motorcyclists
1970	217	8		8	211	11,964	
1971	336	11		13	342	13,865	
1972	314	6		8	312	16,605	
1973	395	13		14	425	19,737	
1974	344	8		9	372	22,964	
1975	377	14	321	14	388	23,980	
1976	465	9	402	9	501	25,058	
1977	495	17	419	19	529	26,560	
1978	523	14	456	14	560	27,590	34,225
1979	597	21	522	22	664	31,102	37,286
1980	707	17	608	18	763	35,045	41,431
1981	697	15	598	15	729	38,265	43,170
1982	548	12	473	13	581	38,418	Not Available
1983	573	12	489	12	591	39,255	45,544
1984	564	10	488	10	567	38,956	45,763
1985	551	14	469	15	569	37,905	45,805

Source: Department of Transportation:Accident Records

TABLE 2-11
PEDESTRIAN FATALITIES AND INJURIES
1970-1985

Year	Fatalities	Injuries
1970	17	158
1971	15	170
1972	30	199
1973	21	161
1974	25	158
1975	11	179
1976	24	158
1977	21	164
1978	15	185
1979	16	167
1980	21	162
1981	20	130
1982	16	146
1983	20	139
1984	14	139
1985	8	136

Source: Department of Transportation:Accident Records

TABLE 2-12
BICYCLE FATALITIES AND INJURIES
1970-1985

Year	Fatalities	Injuries
1970	3	67
1971	4	90
1972	2	94
1973	4	82
1974	2	115
1975	1	108
1976	3	99
1977	7	89
1978	3	82
1979	4	96
1980	0	78
1981	0	83
1982	1	93
1983	1	100
1984	4	94
1985	3	119

Source: Department of Transportation:Accident Records

Holiday Counts

TABLE 2-13 provides a yearly comparison of South Dakota motor vehicle accident experience during major holiday observances. These counts are frequently requested and reported.

TABLE 2-13
ACCIDENTS DURING HOLIDAYS
1975-1985

Holiday	Total Hours	Total Accd.	Fatal Accd.	Injury Accd.	Killed	Injured
MEMORIAL DAY*						
1975	78	125	2	39	3	78
1976	78	135	1	47	1	74
1977	78	147	1	46	1	75
1978	78	146	1	54	1	84
1979	78	144	3	60	3	91
1980	78	128	5	46	12	71
1981	78	129	3	48	3	65
1982	78	129	2	45	2	75
1983	78	119	4	43	4	77
1984	78	110	0	36	0	54
1985	78	124	3	44	3	65
FOURTH OF JULY						
1975	78	136	5	62	6	108
1976	78	175	3	51	3	79
1977	78	169	5	70	6	115
1978	102	241	2	108	3	171
1979	30	60	0	27	0	40
1980	78	166	3	56	3	86
1981	78	174	2	63	2	97
1982	78	160	1	64	1	106
1983	78	136	1	46	1	82
1984	30	61	1	22	1	33
1985	102	170	1	58	1	93
LABOR DAY						
1975	78	126	3	47	3	80
1976	78	181	4	68	4	93
1977	78	179	3	70	3	108
1978	78	150	2	66	2	112
1979	78	140	1	55	1	83
1980	78	108	2	35	2	65
1981	78	149	2	68	2	105
1982	78	134	1	62	1	100
1983	78	132	5	48	6	71
1984	78	111	3	42	3	64
1985	78	127	3	40	3	63

*Nationally Observed

Holiday	Total Hours	Total Accd.	Fatal Accd.	Injury Accd.	Killed	Injured
THANKSGIVING						
1975	102	179	0	39	0	57
1976	102	228	2	56	2	96
1977	102	278	0	66	0	95
1978	102	316	2	76	2	122
1979	102	223	3	48	3	67
1980	102	192	3	63	8	94
1981	102	197	0	39	0	54
1982	102	184	2	47	2	67
1983	102	210	2	44	3	71
1984	102	194	2	56	2	83
1985	102	272	0	51	0	76
CHRISTMAS						
1975	102	184	1	41	1	62
1976	78	116	5	37	10	71
1977	78	206	1	58	4	89
1978	78	149	1	40	1	66
1979	102	162	4	53	4	80
1980	102	222	3	58	3	92
1981	78	103	3	21	3	42
1982	78	198	1	42	1	72
1983	78	155	0	30	0	47
1984	102	195	0	35	0	52
1985	54	97	1	13	2	25
NEW YEARS						
1975-76	102	197	2	42	2	61
1976-77	78	197	2	43	2	56
1977-78	78	254	4	61	4	94
1978-79	78	139	1	34	1	44
1979-80	102	204	3	62	5	91
1980-81	102	169	1	58	1	106
1981-82	78	147	1	32	1	42
1982-83	78	137	2	29	2	39
1983-84	78	166	0	41	0	59
1984-85	102	132	2	24	2	39
1985-86	54	98	1	19	1	27

Source: Department of Transportation:Accident Records

III. 1985 MOTOR VEHICLE ACCIDENT PROFILE

Introduction

This section profiles the reported motor vehicle traffic accidents for 1985. Information will be given on where the accidents are occurring, when accidents happen, who is involved, and factors that contribute to accidents or why they are occurring. Column percentages may not total 100 percent due to rounding error.

During 1985 there were 15,431 reported motor vehicle traffic accidents, the majority being property damage only 11,094 (72%). Injury accidents counted for 4,228 (27%) of the accidents, while 109 (1%) were fatal accidents. There were 6,239 persons injured and 130 persons killed in accidents during 1985 (see TABLE 3-1).

TABLE 3-1
FATALITIES AND SEVERITY OF INJURIES OF DRIVERS,
PASSENGERS, PEDESTRIANS, AND BICYCLISTS
1985

	Incapacitating Injuries		Non-Incap Injuries		Possible Injuries		Total Non-Fatal Injuries		Total Fatalities	
	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	711	58.1	1,698	61.5	1,543	68.4	3,952	63.3	71	54.6
Passengers	434	35.5	931	33.7	670	29.7	2,035	32.6	49	37.7
Pedestrians	45	3.7	66	2.4	25	1.1	136	2.2	8	6.2
Bicycle Drivers	33	2.7	64	2.3	19	0.8	116	1.9	2	1.5
Total	1,223	100	2,759	100	2,257	100	6,239	100	130	100

Note: Incapacitating - severe lacerations, broken limbs or unable to leave the scene of the accident without assistance.

Not Incapaciting - minor lacerations, lumps on the head, abrasions and bruises.

Possible - momentary unconsciousness, limping, nausea, and complaint of pain and injuries not evident.

Source: Department of Transportation:Accident Records

TABLE 3-2 provides information on persons killed and injured by method or mode of transportation. During 1985 the majority of the fatalities and injuries occurred to occupants of passenger cars. Occupants of pickups and vans accounted for nearly one-fifth of the fatalities and injuries. Also over the one-year period eight pedestrians, 15 motorcyclists, and three bicyclists were killed (see FIGURES 3-1 and 3-2).

TABLE 3-2
FATALITIES AND INJURIES BY MODE OF TRANSPORTATION
1985

Mode of Travel	Injury Classification			
	Killed		Injured	
	No.	%	No.	%
Passenger Cars	74	56.9	3,863	61.9
Pickups, Vans	23	17.7	1,283	20.6
Motorcycle, Moped	15	11.5	569	9.1
Pedestrians	8	6.2	136	2.2
Trucks (All)	5	3.8	192	3.1
Bicycle	3	2.3	119	1.9
Farm Machinery	2	1.5	7	0.1
Other	0	0.0	70	1.1
Total	130	100	6,239	100

Note: Other includes Bus, Motor Home, Heavy Equipment, Other Type Motor Vehicles, and Snowmobiles.

Source: Department of Transportation:Accident Records

FIGURE 3-1 FATALITIES BY TRAVEL MODE

1985

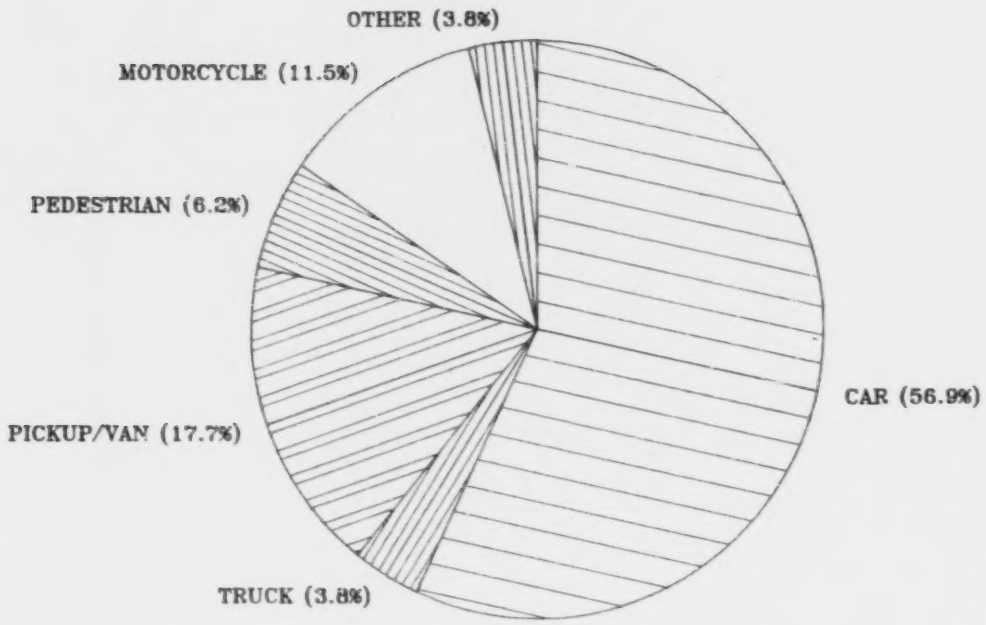


FIGURE 3-2 INJURIES BY TRAVEL MODE

1985

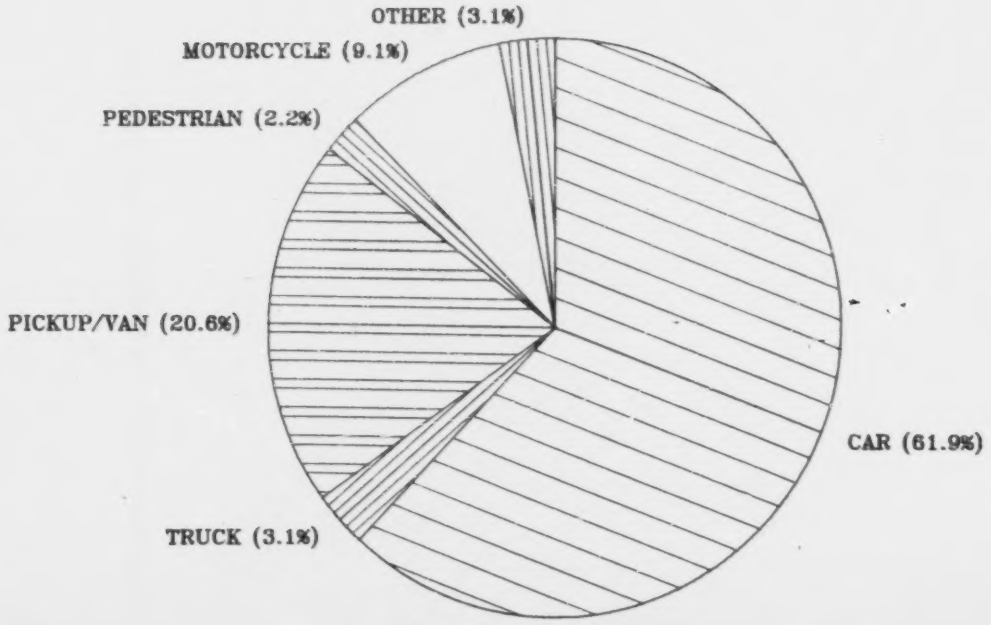


TABLE 3-3 provides information on all accident-involved vehicles by type. Trucks were involved in 38 or 24.7 percent of the vehicles involved in fatal accidents, but truck occupants (see TABLE 3-2 Mode of Transportation) make up only 3.8 percent or five of the persons killed. Passenger cars made up nearly one-half of the vehicles involved in fatal accidents and two-thirds of those involved in injury accidents.

TABLE 3-3
VEHICLE TYPES INVOLVED IN ACCIDENTS
1985

	All Accidents		Fatal Accidents		Injury Accidents		PDO Accidents	
	No.	%	No.	%	No.	%	No.	%
Passenger Cars	17,308	66.5	78	48.1	4,429	63.8	12,801	67.6
Pickups, Vans	6,596	25.3	40	24.7	1,606	23.1	4,952	26.2
Trucks	1,202	4.6	23	14.2	326	4.7	854	4.5
Motorcycle	555	2.1	16	9.9	477	6.9	62	0.3
Farm Machinery or Heavy Equipment	114	0.4	4	2.5	28	0.4	82	0.4
Bus	78	0.3	0	0.0	30	0.4	48	0.3
Motor Home	34	0.1	0	0.0	7	0.1	27	0.1
Moped	12	0.0	0	0.0	12	0.2	0	0.0
Snowmobile	8	0.0	0	0.0	7	0.1	1	0.0
Other or Unknown	125	0.5	1	0.6	19	0.3	102	0.5
Total	26,032	100	162	100	6,941	100	18,929	100

Source: Department of Transportation:Accident Records

TABLE 3-4 provides information on the ages of persons killed and injured. Half of the persons killed were under 28, with more 21 and 23 year olds killed than any other single age. The average age of those killed was 34.9. See the DRIVERS Section beginning on Page 40 for additional age information.

TABLE 3-4
AGE GROUP OF PERSONS
KILLED AND INJURED
1985

	KILLED		INJURED	
	No.	%	No.	%
0 - 5	7	5.4	179	2.9
6 - 13	2	1.5	375	6.0
14 - 15	5	3.8	296	4.7
16 - 18	9	6.9	842	13.5
19 - 20	6	4.6	562	9.0
21 - 24	22	16.9	844	13.5
25 - 34	28	21.5	1,242	19.9
35 - 44	16	12.3	631	10.1
45 - 54	6	4.6	370	5.9
55 - 64	11	8.5	357	5.7
65 & Over	17	13.1	461	7.4
Unknown	1	0.8	80	1.3
Total	130	100	6,239	100

Source: Department of Transportation:Accident Records

First Harmful Event

The initial incident which causes injury or damage is referred to as the first harmful event. A motor vehicle collision with an object such as another motor vehicle (parked and not parked), a fixed or other object, a pedestrian, an animal, a bicycle, or a railroad vehicle accounted for over 89 percent of the first harmful events. The other 10.5 percent are motor vehicles overturning or other noncollision incidents, such as a person falling out of a motor vehicle (see TABLE 3-5).

TABLE 3-5
FIRST HARMFUL EVENT
1985

First Harmful Event	Total Accidents No.	%	Fatal Accidents No.	%	Injury Accidents No.	%	PDO Accidents No.	%
Motor Vehicle Collision With:								
Another MV (Not Parked)	8,627	55.9	43	39.4	2,265	53.6	6,319	57.0
A Fixed or Other Object	2,308	15.0	25	22.9	754	17.8	1,529	13.8
An Animal	1,425	9.2	0	0.0	64	1.5	1,361	12.3
A Parked Motor Vehicle	1,177	7.6	1	0.9	134	3.2	1,042	9.4
A Pedestrian	134	0.9	8	7.3	126	3.0	0	0.0
A Bicyclist	117	0.8	3	2.8	114	2.7	0	0.0
A Railroad Vehicle	25	0.2	2	1.8	9	0.2	14	0.1
Non-Collision (Overturning or Other)	1,618	10.5	27	24.8	762	18.0	829	7.5
Total	15,431	100	109	100	4,228	100	11,094	100

Source: Department of Transportation:Accident Records

The majority of the collisions involve two or more motor vehicles in transport (not parked), followed by collisions with a fixed or other object. There were also a number of collisions with animals and parked motor vehicles. Motor vehicles colliding also account for the largest number of first harmful events in fatal accidents, 43 or 39.4 percent. However, noncollisions are second with 27 or 24.8 percent of the fatal accidents. Collisions with fixed or other objects and pedestrians also account for a large number of fatal accidents.

Manner of Collision

The most common type or manner of collision between two or more vehicles is angle collisions, 35.2 percent, which usually occur at intersections. Rear-end collisions account for 26.7 percent of the total collisions and are second to angle collisions in prevalence. Head-on collisions are over-represented in the fatal accidents where they account for 37.2 percent of the collisions as compared to only 2.3 percent of the total collisions. The majority of the injury-producing collisions are angle and rear-end, 37.8 percent and 32.6 percent respectfully (see TABLE 3-6).

TABLE 3-6
MANNER OF COLLISION FOR ACCIDENTS INVOLVING A COLLISION
BETWEEN TWO OR MORE MOTOR VEHICLES
1985

Manner of Collision	Total Accidents No.	%	Fatal Accidents No.	%	Injury Accidents No.	%	PDO Accidents No.	%
Rear-End	2,301	26.7	4	9.3	739	32.6	1,558	24.7
Head-On	199	2.3	16	37.2	106	4.7	77	1.2
Rear-to-Rear	4	0.0	0	0.0	0	0.0	4	0.1
Angle	3,039	35.2	15	34.9	856	37.8	2,168	34.3
Sideswipe-Same Direction	790	9.2	1	2.3	106	4.7	683	10.8
Sideswipe-Opposite Direction	327	3.8	5	11.6	79	3.5	243	3.8
Turning Movement	1,455	16.9	2	4.7	359	15.8	1,094	17.3
Backing Movement	512	5.9	0	0.0	20	0.9	492	7.8
Total	8,627	100	43	100	2,265	100	6,319	100

Source: Department of Transportation:Accident Records

Highway System

The number of reported accidents by highway system is presented in TABLE 3-7. Over 55 percent of the total, injury, and PDO accidents happened within city limits. City streets and alleys experienced 41 pecent of the PDO accidents and over a third of the injury accidents. Approximately one in five of the injury and PDO accidents occurred on U.S. and State highway routes within city limits.

Over 75 percent of the fatal accidents occurred on noninterstate rural highways with a fairly even split between U.S./State highways and County/Local roads. Across all categories the Interstate System experienced less than nine percent of the accidents while accounting for nearly 18 percent of the vehicle miles traveled in 1985 (see FIGURES 3-3 and 3-4).

TABLE 3-7
ACCIDENTS BY TYPE OF HIGHWAY
1985

Type of Highway	Total Accidents Number	%	Fatal Accidents Number	%	Injury Accidents Number	%	PDO Accidents Number	%
Interstate	1,152	7.5	9	8.3	295	7.0	848	7.6
US/State Hwys.-Rural	2,476	16.0	43	39.4	765	18.1	1,668	15.0
Co./Local Rds.-Rural	2,499	16.2	39	35.8	774	18.3	1,686	15.2
US/State Hwys.-City	3,245	21.0	8	7.3	928	21.9	2,309	20.8
City Streets/Alleys	6,059	39.3	10	9.2	1,466	34.7	4,583	41.3
TOTAL	15,431	100.0	109	100.0	4,228	100.0	11,094	100.0

Source: Department of Transportation:Accident Records

FIGURE 3-3 1985 TRAFFIC ACCIDENTS

By Highway System Type

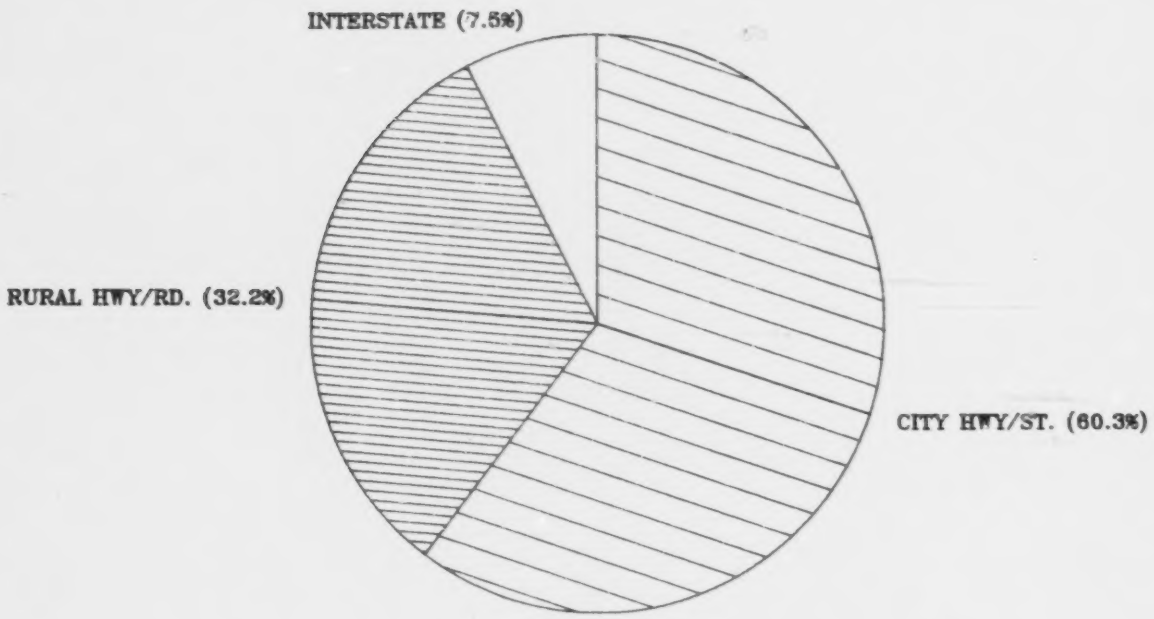
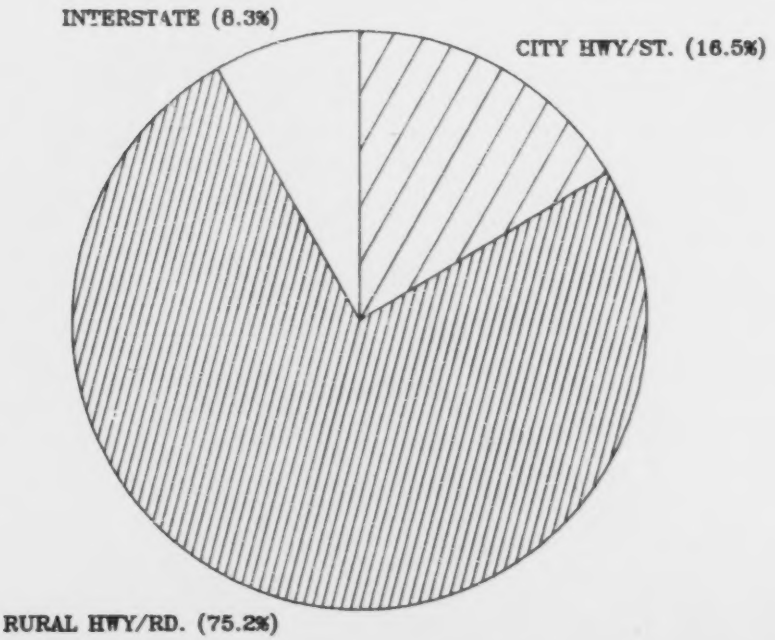


FIGURE 3-4 1985 FATAL TRAFFIC ACCID'S

By Highway System Type



County Summary

TABLE 3-8 provides a summary of all reported accidents by county in South Dakota.

Rural fatal and injury accidents occurred predominantly in 12 counties (see TABLE 3-9). Each of these counties reported at least two percent of all rural fatal and injury accidents. The 12 accounted for 52.5 percent of rural fatal and injury accidents and 22.6 percent of all fatal and injury accidents in South Dakota. Pennington County had 13 percent of all rural fatal and injury accidents with Lawrence and Minnehaha County reporting over six percent of the total. FIGURE 3-5 presents the percentage involvement of rural fatal and injury accidents and compares this to the percentage of rural vehicle miles traveled in these counties. The most current figures available for rural VMTs by county are from 1983.

City Summary

Reported traffic accidents within South Dakota's large cities (population of 2,500 and more) are presented in TABLE 3-10. These cities reported over half of the total accidents and injury accidents and 11 percent of the fatal accidents. The three largest cities - Sioux Falls, Rapid City, and Aberdeen - accounted for 64 percent of the total accidents, 70 percent of the injury accidents and 75 percent of the fatal accidents that occurred in cities with populations of 2,500 or more.

Roadway Surface Conditions

The majority of the accidents occurred on dry roads, including fatal and injury accidents (see TABLE 3-11). Combining similar "bad" road conditions, ice, snow, frost and slush accounts for less than one-third (30.9%) of all reported accidents and 20.4 percent of all fatal and injury accidents. Over two-thirds of all fatal and injury accidents occurred on dry roads.

Contributing Circumstances (Vision Obscurement and Other)

Contributing circumstances at the accident level involve two categories: vision obscurement and other. The reporting officer may include one, two, or no contributing circumstances for each category. Vision obscurement refers to conditions such as: fog or smoke, blowing soil, dirt or sand, rain, snow, sleet or hail, windshield or window obscured, glare from sun or lights, trees or other vegetation, snowbank, etc. Vision obscurement as a contributing circumstance was indicated in just over 21 percent of all accidents with two separate vision obscurements being reported in less than three percent of all accidents. Rain, snow, sleet or hail was the most frequently reported vision obscurement and was indicated as a problem in 7.6 percent of all accidents.

Contributing Circumstances - Other - was reported in 37.7 percent of all accidents with two being reported in 4.3 percent of all accidents. These contributing circumstances include wind conditions, slippery surface, road shoulder conditions, objects or animals in the road, phantom vehicle, pedestrians, bicyclists, road construction conditions, rough roads, or faulty or missing traffic control devices. The most common condition reported was slippery surface, and it was reported as a factor in 26.4 percent of all accidents.

TABLE 3-8
REPORTED TRAFFIC ACCIDENTS
SOUTH DAKOTA COUNTIES
1985

County	Total Accd.	Fatal Accd.	Injury Accd.	PDO Accd.	Fatalities	Injuries
AURORA	69	0	15	54	0	32
BEADLE	494	3	137	354	3	195
BENNETT	6	0	3	3	0	3
BON HOMME	74	0	24	50	0	33
BROOKINGS	501	4	103	394	4	138
BROWN	1,037	7	297	733	8	457
BRULE	144	3	25	116	3	37
BUFFALO	12	0	3	9	0	7
BUTTE	125	2	25	98	3	37
CAMPBELL	21	1	3	17	1	3
CHARLES MIX	110	3	32	75	3	58
CLARK	76	1	10	65	1	14
CLAY	161	0	56	105	0	83
CODINGTON	435	0	117	318	0	154
CORSON	59	2	20	37	4	42
CUSTER	193	3	50	140	3	64
DAVISON	594	1	139	454	1	198
DAY	137	0	29	108	0	42
DEUEL	87	0	17	70	0	26
DEWEY	67	0	11	56	0	18
DOUGLAS	32	1	7	24	1	10
EDMUNDS	75	1	20	54	1	30
FALL RIVER	177	1	43	133	1	60
FAULK	61	1	18	42	1	22
GRANT	82	1	21	60	1	40
GREGORY	96	2	22	72	2	37
HAAKON	90	0	17	73	0	28
HAMLIN	86	1	16	69	2	27
HAND	109	0	30	79	0	44
HANSON	75	2	18	55	2	29
HARDING	42	1	12	29	1	20
HUGHES	384	1	82	301	1	121
HUTCHINSON	103	3	26	74	3	38
HYDE	30	0	7	23	0	12
JACKSON	108	2	41	65	4	57
JERAULD	49	0	10	39	0	14
JONES	51	0	13	38	0	18
KINGSBURY	108	1	23	84	1	35
LAKE	226	1	61	164	1	94
LAWRENCE	590	3	163	424	4	235
LINCOLN	242	4	86	152	5	127
LYMAN	105	1	34	70	1	52

TABLE 3-8 (Continued)

County	Total Accd.	Fatal Accd.	Injury Accd.	PDO Aecd.	Fatalities	Injuries
MC COOK	133	1	24	108	1	35
MC PHERSON	32	0	14	18	0	28
MARSHALL	107	0	27	80	0	35
MEADE	284	4	93	187	4	167
MELLETTE	32	1	6	25	1	11
MINER	53	1	12	40	2	18
MINNEHAHA	3,250	13	914	2,323	20	1,316
MOODY	179	1	57	121	1	89
PENNINGTON	2,575	11	807	1,757	12	1,158
PERKINS	68	0	24	44	0	33
POTTER	57	0	16	41	0	22
ROBERTS	129	0	40	89	0	55
SANBORN	80	0	15	65	0	28
SHANNON	30	6	9	15	8	23
SPINK	128	2	15	111	2	22
STANLEY	76	0	17	59	0	27
SULLY	46	0	9	37	0	12
TODD	33	4	10	19	4	32
TRIPP	141	3	29	109	3	45
TURNER	89	1	25	63	1	30
UNION	122	1	41	80	1	64
WALWORTH	80	0	18	62	0	28
YANKTON	368	2	117	249	3	167
ZIEBACH	16	1	3	12	1	3
Total	15,431	109	4,228	11,094	130	6,239

Source: Department of Transportation:Accident Records

TABLE 3-9
COUNTIES HAVING MORE THAN TWO PERCENT OF THE
RURAL FATAL & INJURY ACCIDENTS
1985

County	Number of Rural Fatal & Injury Accd.	Percent of All Rural Fatal & Injury Accd.
BROOKINGS	37	2.0
BROWN	79	4.2
CUSTER	50	2.7
JACKSON	42	2.2
LAKE	41	2.2
LAWRENCE	121	6.5
LINCOLN	74	4.0
MEADE	71	3.8
MINNEHAHA	115	6.1
MOODY	56	3.0
PENNINGTON	245	13.1
YANKTON	51	2.7
Total	982	52.5

Source: Department of Transportation:Accident Records

FIGURE 3-5 RURAL F&I ACC/VMT'S

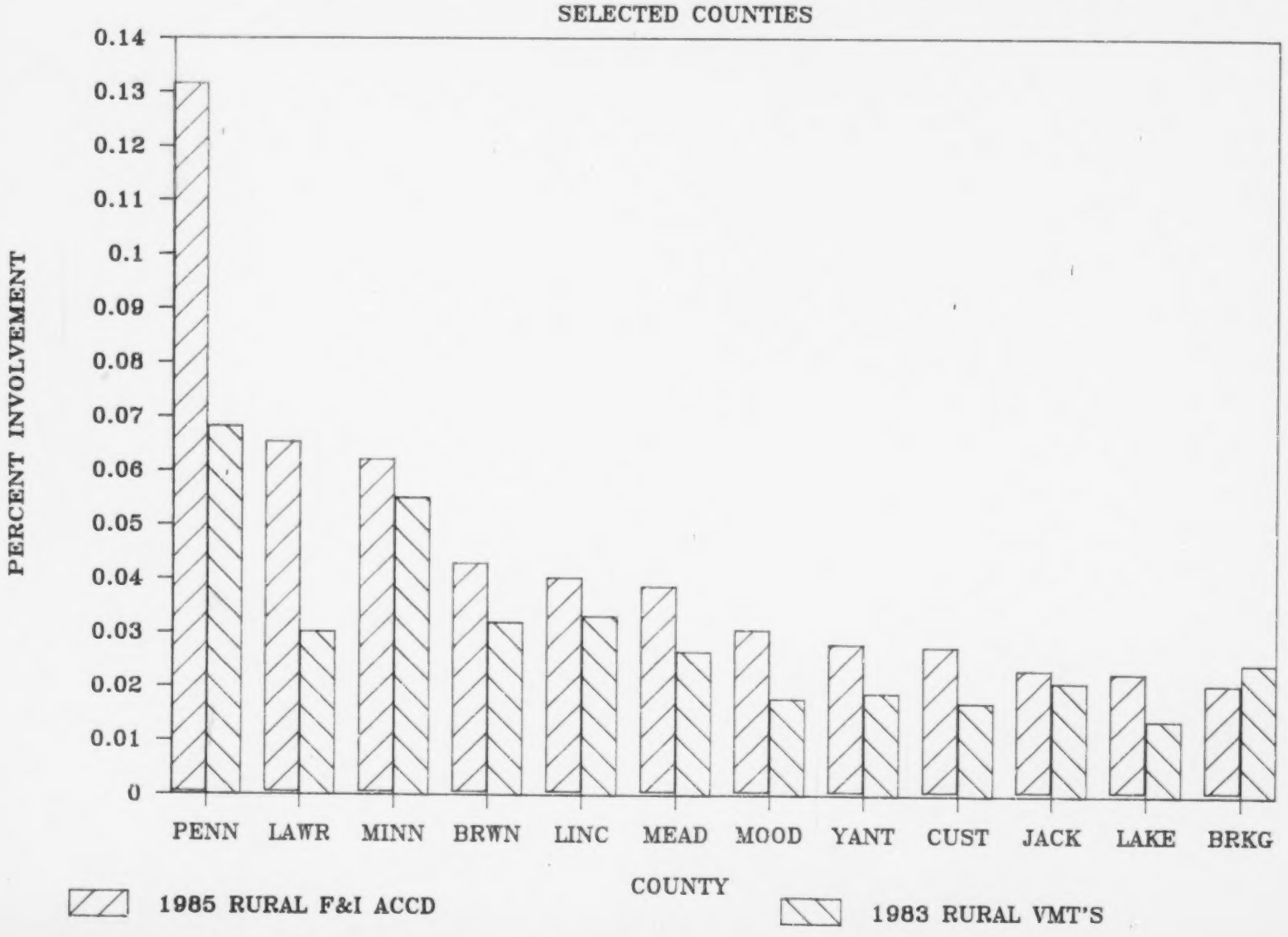


TABLE 3-10
TRAFFIC ACCIDENTS
SOUTH DAKOTA CITIES
POPULATION 2500 AND OVER
1985

City	Total Accd.	Fatal Accd.	Injury Accd.	PDO Accd.	Fatalities	Injuries
Aberdeen	734	2	220	512	2	314
Belle Fourche	58	0	7	51	0	11
Box Elder	52	0	13	39	0	17
Brandon City	26	0	7	19	0	10
Brookings	312	0	68	244	0	91
Canton	45	0	13	32	0	20
Hot Springs	84	0	15	69	0	23
Huron	353	0	104	249	0	141
Lead	68	0	11	57	0	12
Madison	101	0	20	81	0	25
Milbank	24	0	6	18	0	6
Mitchell	497	1	116	380	1	156
Mobridge	32	0	5	27	0	6
Pierre	319	0	60	259	0	85
Rapid City	1,773	2	553	1,218	2	785
Redfield	19	0	3	16	0	3
Sioux Falls	2,780	5	787	1,988	5	1,109
Sisseton	36	0	6	30	0	8
Spearfish	120	1	20	99	2	25
Sturgis	111	0	26	85	0	40
Vermillion	91	0	32	59	0	50
Watertown	291	0	79	212	0	101
Winner	83	0	6	77	0	7
Yankton	237	1	64	172	1	94

Source: Department of Transportation:Accident Records

TABLE 3-11
ROADWAY SURFACE CONDITIONS
1985

	Total Accd. No.	%	Fatal Accd. No.	%	Injury Accd. No.	%	PDO Accd. No.	%
Dry	8,964	58.1	89	81.7	2,810	66.5	6,065	54.7
Wet	1,550	10.0	11	10.1	490	11.6	1,049	9.5
Ice	2,849	18.5	3	2.8	519	12.3	2,327	21.0
Frost	187	1.2	0	0.0	54	1.3	133	1.2
Slush	152	1.0	1	0.9	39	0.9	112	1.0
Snow	1,573	10.2	2	1.8	267	6.3	1,304	11.8
Mud	36	0.2	0	0.0	14	0.3	22	0.2
Other	53	0.3	2	1.8	24	0.6	27	0.2
Unknown	67	0.4	1	0.9	11	0.3	55	0.5
Total	15,431	100	109	100	4,228	100	11,094	100

Source: Department of Transportation:Accident Records

Accidents by Time of Day, Month, and Day of Week

The late afternoon, 3:00-6:00 P.M., was the peak three-hour period for accidents to occur. Twenty-three percent of property damage only and injury accidents occurred during this time period. The one-hour periods, 2:00-3:00 AM and 7:00-8:00 PM, had the most fatal accidents (9), but the most fatalities (13) occurred between 6:00-7:00 PM, (see TABLE 3-12).

The summer months had the most fatal and injury accidents during 1985, while the winter months had more PDO accidents. Over one-quarter of the fatal accidents and over 20 percent of the injury accidents occurred in July and August. There is more vacation and other recreational travel during these months. Over 27 percent of the PDO accidents occurred in November and December. The road conditions in the winter months contribute to the increase in PDO accidents (see TABLE 3-13).

Friday and Saturday account for over one-third of the injury accidents, while Saturday and Sunday account for 44 percent of the fatal accidents (see TABLE 3-14). FIGURES 3-7 through 3-9 illustrate the trends of time of day, month, and day of week.

TABLE 3-12
ACCIDENTS
BY TIME OF DAY
1985

Time	Total Accd.	Fatal Accd.	Injury Accd.	PDO Accd.	Killed	Injured
MIDNIGHT	409	5	132	272	5	184
1:00 AM	381	2	130	249	2	187
2:00 AM	354	9	137	208	9	220
3:00 AM	199	2	58	139	2	65
4:00 AM	132	3	42	87	3	62
5:00 AM	153	1	41	111	2	48
6:00 AM	291	2	75	214	3	87
7:00 AM	556	2	164	390	2	240
8:00 AM	678	2	163	513	2	224
9:00 AM	545	3	142	400	5	226
10:00 AM	646	5	172	469	5	255
11:00 AM	717	4	191	522	4	270
12:00 PM	881	6	235	640	6	348
1:00 PM	885	5	234	646	7	356
2:00 PM	918	8	232	678	11	355
3:00 PM	1,296	1	327	968	1	523
4:00 PM	1,186	8	342	836	9	493
5:00 PM	1,110	5	321	784	5	464
6:00 PM	859	6	235	618	13	350
7:00 PM	759	9	190	560	10	285
8:00 PM	623	6	154	463	8	251
9:00 PM	683	7	174	502	7	259
10:00 PM	597	4	171	422	5	264
11:00 PM	424	2	134	288	2	182
UNKNOWN	149	2	32	115	2	41
TOTAL	15,431	109	4,228	11,094	130	6,239

Source: Department of Transportation:Accident Records

TABLE 3-13
ACCIDENTS
BY MONTH
1985

Month	Total Accd.	Fatal Accd.	Injury Accd.	PDO Accd.	Killed	Injured
JANUARY	1,325	4	269	1,052	4	389
FEBRUARY	925	3	220	702	5	329
MARCH	1,164	7	337	820	7	479
APRIL	936	9	308	619	11	468
MAY	1,181	11	406	764	11	616
JUNE	1,152	13	385	754	15	584
JULY	1,225	13	412	800	13	608
AUGUST	1,283	16	458	809	19	717
SEPTEMBER	1,186	9	353	824	10	526
OCTOBER	1,287	12	362	913	20	531
NOVEMBER	1,841	7	350	1,484	8	490
DECEMBER	1,926	5	368	1,553	7	502
TOTAL	15,431	109	4,228	11,094	130	6,239

Source: Department of Transportation:Accident Records

TABLE 3-14
ACCIDENTS
BY DAY OF WEEK
1985

Day	Total Accd.	Fatal Accd.	Injury Accd.	PDO Accd.	Killed	Injured
SUNDAY	1,744	23	507	1,214	31	810
MONDAY	2,032	14	536	1,482	15	768
TUESDAY	2,024	9	534	1,481	10	795
WEDNESDAY	2,141	13	553	1,575	16	781
THURSDAY	2,251	13	628	1,610	14	883
FRIDAY	2,780	12	763	2,005	15	1,108
SATURDAY	2,459	25	707	1,727	29	1,094
TOTAL	15,431	109	4,228	11,094	130	6,239

Source: Department of Transportation:Accident Records

FIGURE 3--6 ACCIDENTS BY TIME OF DAY

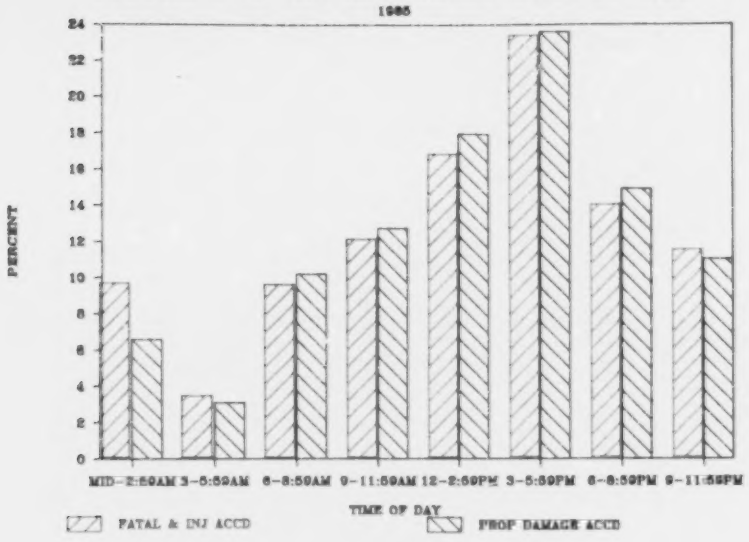


FIGURE 3-7 ACCIDENTS BY MONTH

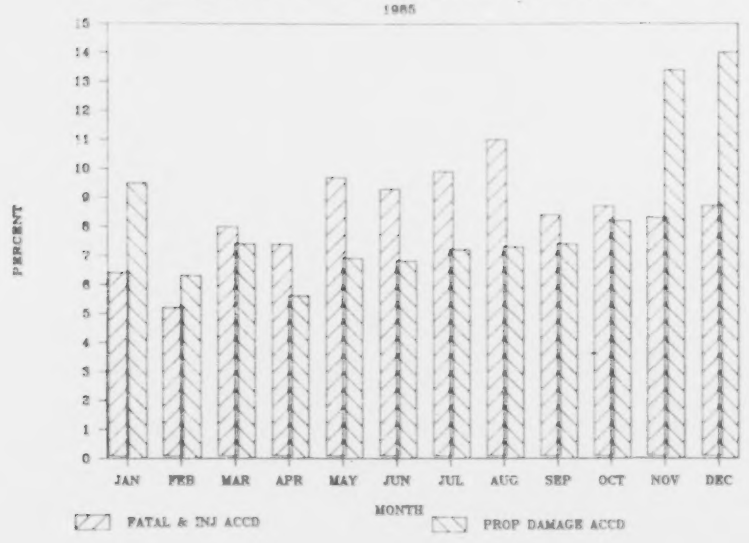
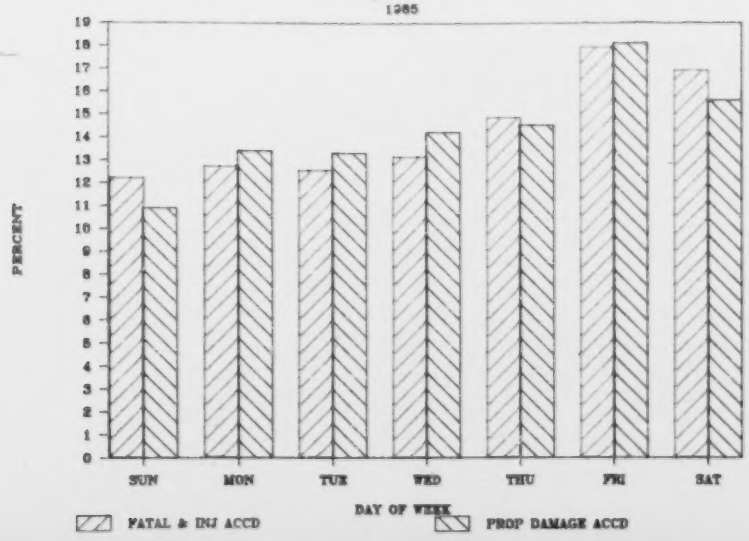


FIGURE 3-8 ACCIDENTS BY DAY OF WEEK



Drivers

There were 24,476 motor vehicle drivers in the 15,431 reported motor vehicle accidents, 152 drivers in fatal accidents and 6,722 drivers in injury accidents. Seventy-one drivers were killed, which is 54.6 percent of all persons killed in motor vehicle accidents while 63.3 percent or 3,952 of the 6,239 injured were drivers.

Young drivers are involved in more accidents than any other age group (see TABLE 3-15). Thirty-nine percent of the drivers in reported accidents are under 25 years of age and 62.7 percent are under 35. Age of drivers involved in fatal and injury accidents follow the pattern of drivers in all accidents. Those drivers under 25 represent 33.5 percent of the drivers involved in fatal accidents and 40.5 percent of the drivers in injury accidents while drivers under the age of 35 make up 58.5 percent of the drivers in fatal accidents and 64.3 percent of the drivers in injury accidents.

TABLE 3-15
AGE OF DRIVERS IN ACCIDENTS
1985

Age	Drivers In All Accidents No.	%	Drivers In Fatal Accidents No.	%	Drivers In Injury Accidents No.	%	Drivers In PDO Accidents No.	%
6-13	24	0.1	0	0.0	16	0.2	8	0.0
14-15	741	3.0	2	1.3	212	3.2	527	3.0
16-18	3,215	13.1	14	9.2	879	13.1	2,322	13.2
19-20	2,078	8.5	11	7.2	608	9.0	1,459	8.3
21-24	3,532	14.4	24	15.8	1,009	15.0	2,499	14.2
25-34	5,767	23.6	38	25.0	1,599	23.8	4,130	23.5
35-44	3,295	13.5	22	14.5	909	13.5	2,364	13.4
45-54	1,874	7.7	9	5.9	465	6.9	1,400	8.0
55-64	1,803	7.4	12	7.9	484	7.2	1,307	7.4
65-Over	1,994	8.1	17	11.2	520	7.7	1,457	8.3
Unknown	153	0.6	3	2.0	21	0.3	129	0.7
Total	24,476	100	152	100	6,722	100	17,602	100

Source: Department of Transportation:Accident Records

Drinking drivers are of major concern because of the number of alcohol-involved serious accidents. TABLE 3-16 provides information on the age of drinking drivers in motor vehicle accidents. There were a reported 1,787 drinking drivers in all accidents which is about 7.3 percent of all drivers in accidents. Fifty-eight or 38.2 percent of drivers in fatal accidents had been drinking while 12.3 percent of the drivers involved in injury accidents had been drinking. Young drivers are predominantly the drinking drivers in accidents. Those drivers under 25 years of age accounted for over 40 percent of the drinking drivers in fatal accidents and one-half of the drinking drivers in all accidents; while those under 35 years of age were 75-80 percent of the drinking drivers in the various accident classes.

TABLE 3-16
AGE OF DRINKING DRIVERS IN ACCIDENTS
1985

Age	Drivers In All Accidents No.	%	Drivers In Fatal Accidents No.	%	Drivers In Injury Accidents No.	%	Drivers In PDO Accidents No.	%
6-13	0	0.0	0	0.0	0	0.0	0	0.0
14-15	11	0.6	0	0.0	5	0.6	6	0.7
16-18	211	11.8	6	10.3	95	11.4	110	12.2
19-20	260	14.5	7	12.1	117	14.1	136	15.1
21-24	433	24.2	11	19.0	199	24.0	223	24.8
25-34	531	29.7	19	32.8	257	31.0	255	28.4
35-44	171	9.6	5	8.6	83	10.0	83	9.2
45-54	71	4.0	2	3.4	31	3.7	38	4.2
55-64	52	2.9	3	5.2	23	2.8	26	2.9
65-Over	42	2.4	3	5.2	18	2.2	21	2.3
Unknown	5	0.3	2	3.4	2	0.2	1	0.1
Total	1,787	100	58	100	830	100	899	100

Source: Department of Transportation:Accident Records

TABLE 3-17 compares age of drivers in fatal and injury accidents, drinking drivers in fatal and injury accidents, and speeding drivers in fatal and injury accidents with licensed drivers by age. Again the young driver is overrepresented as those drivers in fatal and injury accidents, drinking drivers in fatal and injury accidents, and speeding drivers in fatal and injury accidents. Twenty-one percent of the licensed drivers in South Dakota were under 25, but 50 percent of the drinking drivers in fatal and injury accidents and 56 percent of the speeding drivers in fatal and injury accidents were under 25 years of age. Over 81 percent of the drinking drivers in fatal and injury accidents and 80 percent of the speeding drivers in fatal and injury accidents were under 35 years of age while constituting 44 percent of all licensed drivers (also see FIGURES 3-9 and 3-10)

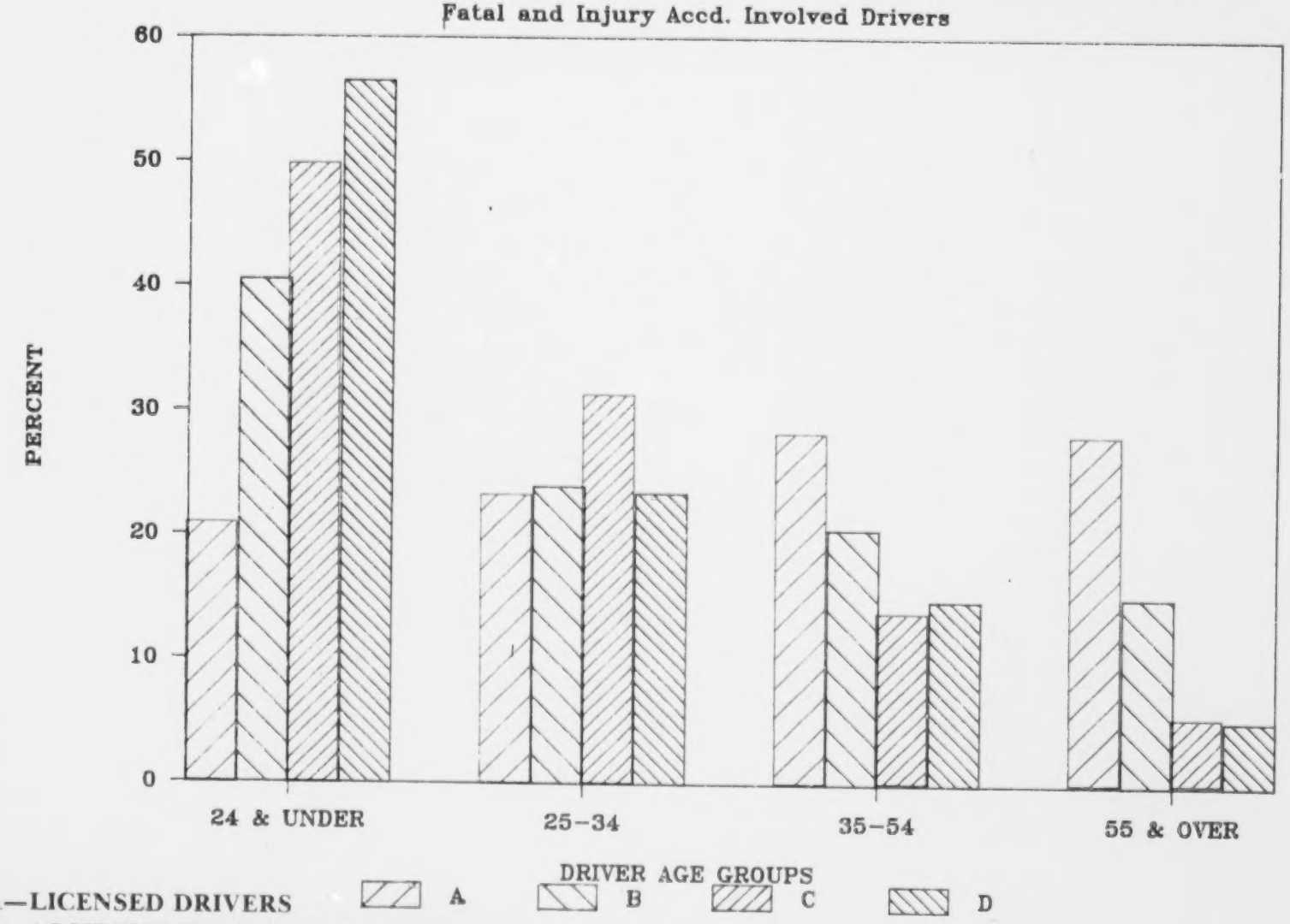
TABLE 3-17
LICENSED DRIVERS AND FATAL AND INJURY ACCIDENT-INVOLVED DRIVERS BY AGE
1985

Age	Licensed Drivers %	Drivers In Fatal & Injury Accidents No.	%	Drinking Drivers In Fatal & Injury Accidents No.	%	Speeding Drivers In Fatal & Injury Accidents No.	%
0-13	0.0	16	0.2	0	0.0	5	0.4
14-15	1.6	214	3.1	5	0.6	50	4.1
16-17	3.6	561	8.2	57	6.4	155	12.6
18	1.9	332	4.8	44	5.0	96	7.8
19	2.0	313	4.6	59	6.7	85	6.9
20	2.1	306	4.5	65	7.4	71	5.8
21-24	9.7	1,033	15.1	210	23.8	231	18.8
25-34	23.2	1,637	23.9	276	31.2	287	23.4
35-44	16.3	931	13.6	88	10.0	133	10.8
45-54	11.8	474	6.9	33	3.7	49	4.0
55-64	12.3	496	7.2	26	2.9	34	2.8
65 & Over	15.6	537	7.8	21	2.4	31	2.5
Total	100	6,850	100	884	100	1,227	100

Note: Excludes drivers with an unknown age.
July 1, 1984 the legal drinking age for 3.2 beer was raised to 19 from 18.

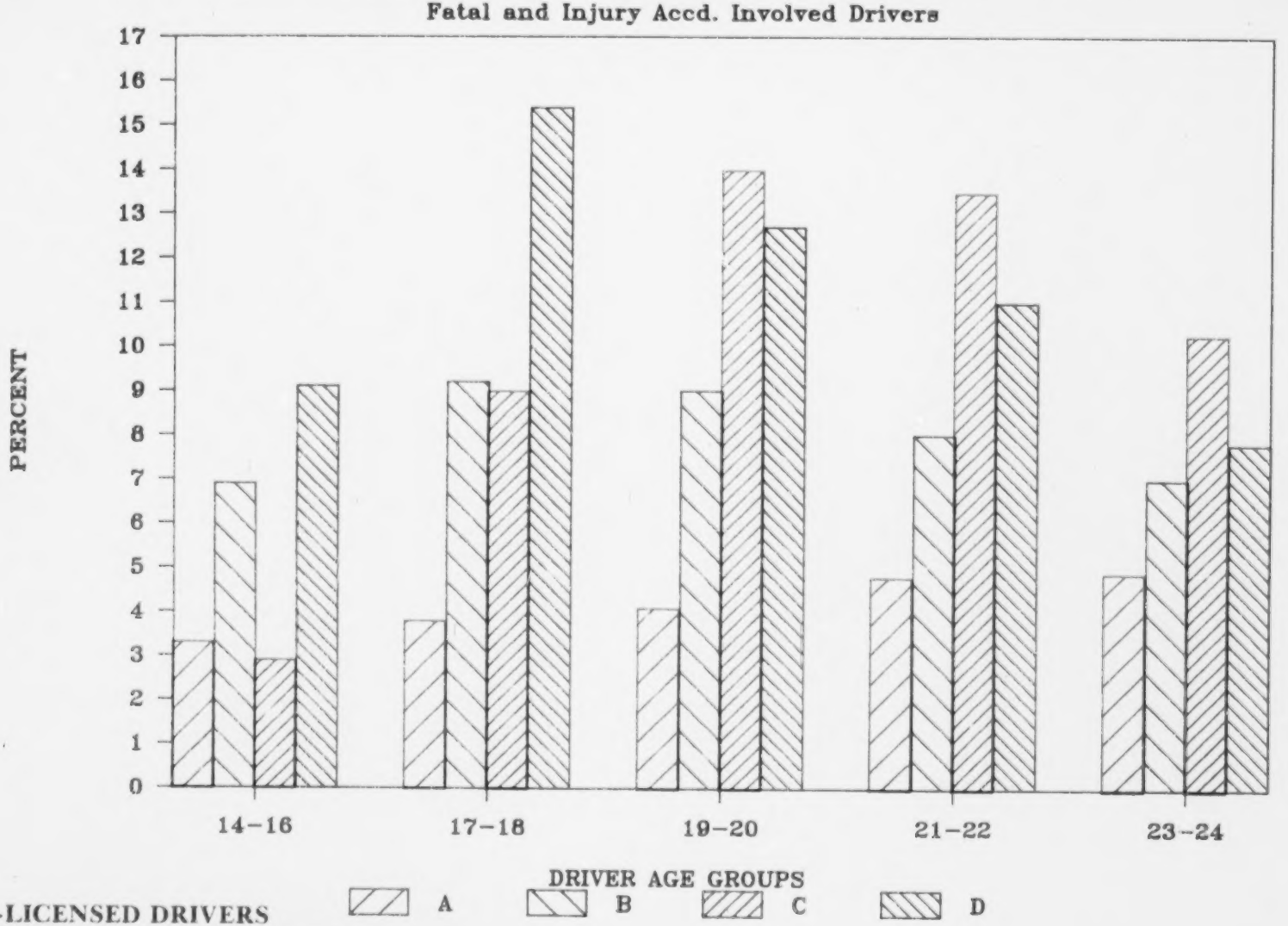
Source: Department of Transportation:Accident Records

FIGURE 3–9 DRIVERS BY AGE GROUP 1985



A—LICENSED DRIVERS
B—ACCIDENT INVOLVED DRIVERS
C—ACC INVOLVED DRINKING DRIVERS
D—ACC INVOLVED SPEEDING DRIVERS

FIGURE 3–10 YOUNG DRIVERS 1985



A—LICENSED DRIVERS
B—ACCIDENT INVOLVED DRIVERS
C—ACC INVOLVED DRINKING DRIVERS
D—ACC INVOLVED SPEEDING DRIVERS

Driver actions are reported to indicate possible factors that may have contributed to the accidents. These factors are referred to as driver contributing circumstances. Drinking was the leading driver contributing circumstance in fatal accidents during 1985. It was indicated that the drinking of 58 or 38.2 percent of the drivers in fatal accidents contributed to the accident. Exceeding the speed limit and driving on the wrong side of the road were the other leading driver contributing circumstance in fatal accidents. Failing to yield to another vehicle was the leading contributing circumstance in injury accidents. Drinking and exceeding a safe speed but not the legal limit were other leading driver contributing circumstances in injury accidents (see TABLE 3-18).

TABLE 3-18
MOTOR VEHICLE DRIVER CONTRIBUTING CIRCUMSTANCES
1985

	Total Accd.		Fatal Accd.		Injury Accd.		PDO Accd.	
	No.	%	No.	%	No.	%	No.	%
No Contributing Circumstance	12,132	49.6	40	26.3	3,028	45.0	9,064	51.5
Drinking	1,787	7.3	58	38.2	830	12.3	899	5.1
Exceeded Speed Limit	1,134	4.6	25	16.4	519	7.7	590	3.4
Wrong Side of Road	593	2.4	24	15.8	236	3.5	333	1.9
Exceeded Safe Speed But Not Limit	2,459	10.0	13	8.6	676	10.1	1,770	10.1
Failed to Yield to Vehicle	3,376	13.8	10	6.6	972	14.5	2,394	13.6
Failed to Stop for Stop Sign/Flashing Red	414	1.7	9	5.9	159	2.4	246	1.4
Fell Asleep	347	1.4	7	4.6	172	2.6	168	1.0
Improper Passing	305	1.2	4	2.6	89	1.3	212	1.2
Distracted by Obj/ Person in Car	480	2.0	0	0.0	188	2.8	292	1.7
Improper Turn	708	2.9	3	2.0	187	2.8	518	2.9
Following Too Closely	1,051	4.3	0	0.0	347	5.2	704	4.0
Improper Backing	467	1.9	0	0.0	19	0.3	448	2.5
Other*	2,643	10.8	30	19.7	773	11.5	1,840	10.5
Unknown	665	2.7	12	7.9	141	2.1	512	2.9
Total Drivers	24,476		152		6,722		17,602	

Note: The investigating officer may assign from zero to three contributing circumstances to each driver; therefore, the number of drivers in motor vehicle accidents does not equal the number of contributing circumstances. The number of drivers having drinking as a contributing circumstance is equal to the number of reported drinking drivers in accidents.

*Other includes driving under posted minimum, failed to yield to pedestrian, disregarded stop and go signal, disregarded other traffic control devices, improper signal or failure to signal, turning from wrong lane, improper lane change, improper start from parked position, improper parking, failure to comply with license restrictions, drugs, illness, physical impairment, and illegally in roadway.

Source: Department of Transportation:Accident Records

Motorcycles

Motorcycle accidents constitute 3.6 percent of all accidents, 12.8 percent of all fatal accidents, and 11.1 percent of all injury accidents. There were 15 people killed and 569 injured on motorcycles in the 551 reported motorcycle accidents during 1985. The number of motorcycle accidents have shown a decline in the last few years, while the number of motorcycle registrations and licensed motorcyclists have stablized at approximately 38,000 and 45,000 respectively (see TABLE 2-10). The young motorcycle driver is overrepresented in accidents when compared to their portion of licensed motorcycle operators. Twenty-eight percent of all accident-involved riders are less than 20 years of age and over 70 percent are under 30 (see TABLE 3-19 and FIGURE 3-11).

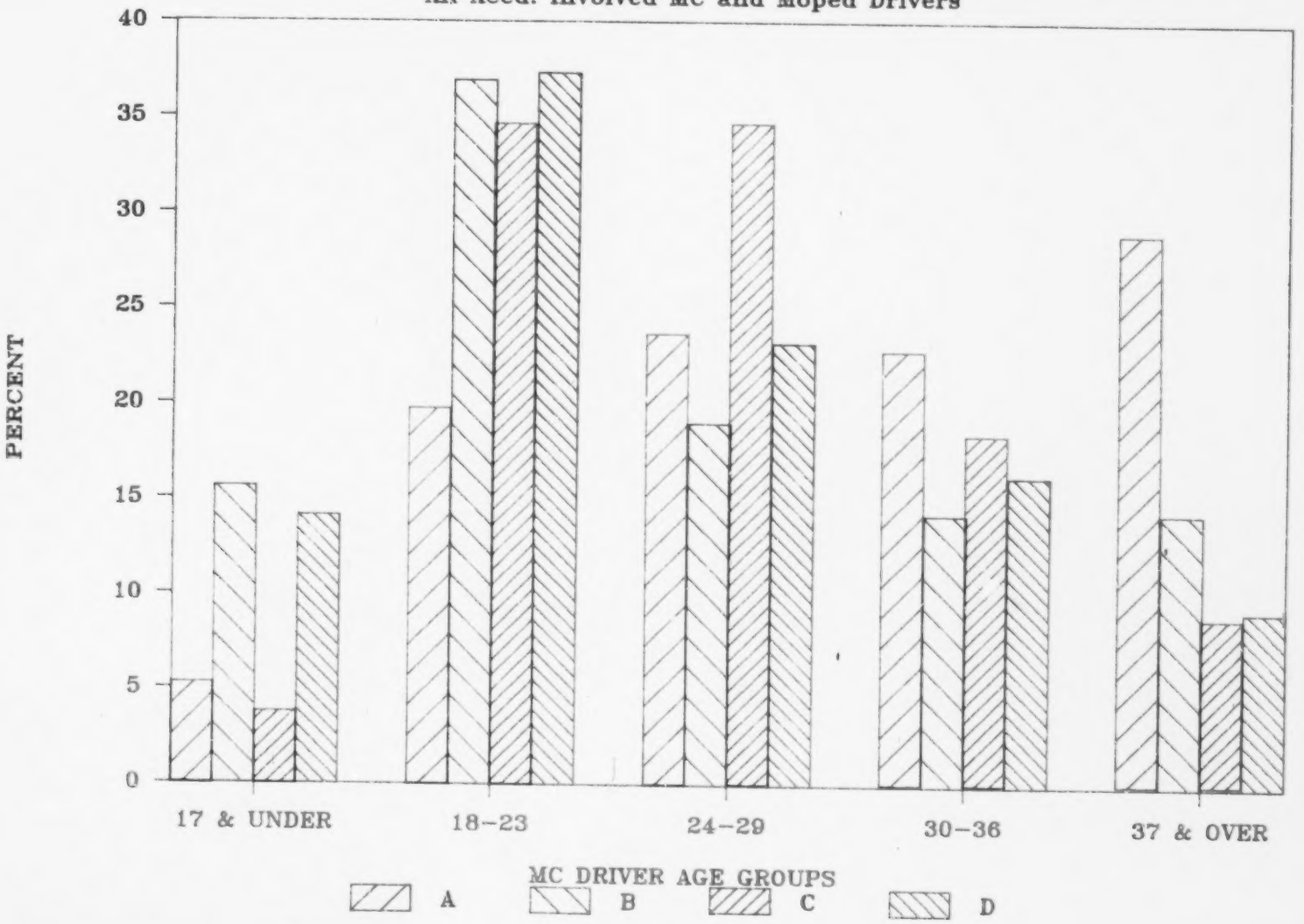
TABLE 3-19
MOTORCYCLISTS BY AGE GROUP
1985

Age Group	Licensed Motorcyclists No.	%	Accident Involved Motorcyclists No.	%	Accident Involved Drinking Motorcyclists No.	%	Accident Involved Speeding Motorcyclists No.	%
0-13	0	0.0	5	0.9	0	0.0	1	0.7
14-15	683	1.5	32	5.7	0	0.0	6	4.2
16-17	1,732	3.8	50	9.0	4	3.8	13	9.2
18-19	2,257	4.9	69	12.4	9	8.7	20	14.1
20-21	3,098	6.8	62	11.1	12	11.5	16	11.3
22-23	3,654	8.0	75	13.4	15	14.4	17	12.0
24-25	3,514	7.7	40	7.2	15	14.4	9	6.3
26-27	3,685	8.0	38	6.8	14	13.5	15	10.6
28-29	3,596	7.9	28	5.0	7	6.7	9	6.3
30-31	3,474	7.6	32	5.7	8	7.7	11	7.7
32-36	6,918	15.1	47	8.4	11	10.6	12	8.5
37-41	4,347	9.5	33	5.9	8	7.7	6	4.2
42-51	4,828	10.5	23	4.1	1	1.0	4	2.8
52-Over	4,019	8.8	24	4.3	0	0.0	3	2.1
Total	45,805	100	558	100	104	100	142	100

Source: Department of Transportation:Accident Records
Department of Commerce & Regulation:Driver License Issuance

NOTE: Excludes drivers with an unknown age.

FIGURE 3-11 MOTORCYCLISTS 1985



A—LICENSED MOTORCYCLISTS
B—ACC INVOLVED MOTORCYCLISTS
C—ACC INVOLVED DRINKING MOTORCYCLISTS
D—ACC INVOLVED SPEEDING MOTORCYCLISTS

Helmets were used by 146 or 27.7 percent of the motorcycle drivers in accidents while 381 or 72.3 percent did not wear a helmet (see TABLE 3-20). Twelve motorcycle drivers and three motorcycle passengers were killed during 1985; two were wearing helmets and an additional driver was utilizing the required eye protection.

None of the three killed motorcyclists under 18 years of age were wearing a helmet as required by law.

TABLE 3-20
HELMET USE BY MOTORCYCLE DRIVERS IN ACCIDENTS
1985

	Helmet Used		Helmet Not Used	
Age	No.	%	No.	%
6-13	1	33.3	2	66.7
14-15	23	79.3	6	20.7
16-17	25	53.2	22	46.8
18-20	18	18.2	81	81.8
21-24	26	22.0	92	78.0
25-34	31	21.7	112	78.3
35-44	11	21.2	41	78.8
45 & Over	11	31.4	24	68.6
Unknown & Not Stated	0	0.0	1	100
Total	146	27.7	381	72.3

Note: Percentages are row percents.

Source: Department of Transportation:Accident Records

Pedestrians

There were eight pedestrians killed and 136 injured in motor vehicle accidents during 1985 (see TABLE 3-21). The youngest pedestrian killed was 21 years old while the oldest was 61. Most of the injured pedestrians were younger persons, 57.4 percent were under 25 years old. Since 1970 there has been an average of 18 pedestrians killed in accidents each year (see TABLE 2-11). Illegally in roadway, failure to yield to vehicle, and drinking were the three most common contributing circumstances in pedestrian fatalities. There were no contributing circumstances in 74 or 54 percent of the pedestrian injuries. Officers reported that 25 percent or two of the pedestrians killed had been drinking alcohol (see TABLE 3-22). The average BAC of those pedestrians who had been drinking was .27 percent. Seventy-five percent of the pedestrian fatalities occurred in rural areas while the majority, 85 percent, of the pedestrian injuries happened in urban areas (see TABLE 3-23).

TABLE 3-21
AGE OF PEDESTRIANS IN
TRAFFIC ACCIDENTS
1985

	Fatalities		Injuries	
Age	No.	%	No.	%
0-5	0	0.0	19	14.0
6-13	0	0.0	26	19.1
14-19	0	0.0	17	12.5
20-24	4	50.0	16	11.8
25-34	1	12.5	22	16.2
35-44	1	12.5	7	5.1
45-54	0	0.0	4	2.9
55-64	2	25.0	6	4.4
65 & Over	0	0.0	18	13.2
Unknown	0	0.0	1	0.7
Total	8	100	136	100

Source: Department of Transportation:Accident Records

TABLE 3-22
ALCOHOL INVOLVEMENT BY PEDESTRIANS
1985

Alcohol Involvement	Fatalities		Injuries	
	No.	%	No.	%
Alcohol or Drugs	2	25.0	15	11.0
No Alcohol	4	50.0	115	84.6
Unknown	2	25.0	6	4.4
Total	8	100	136	100

Source: Department of Transportation:Accident Records

TABLE 3-23
RURAL VS. URBAN PEDESTRIAN ACCIDENTS
1985

	Killed	Injured
Rural	6	20
Urban	2	116
Total	8	136

Source: Department of Transportation:Accident Records

Bicycles

There were two bicycle drivers killed and 116 injured in reported motor vehicle accidents during 1985 (see TABLE 3-24). There was also one bicycle passenger killed and three injured during 1985. The leading factor in bicycle involved crashes was the bicycle driver failing to yield to a motor vehicle. Other bicyclist contributing circumstances were improper turning, being on the wrong side of the road, illegally in the roadway, and failing to stop for stop sign or flashing red light. Thirty-nine of the bicycle drivers in accidents had no contributing circumstances. The yearly, 1970-1985, trend of bicycle fatalities and injuries is provided in TABLE 2-12.

TABLE 3-24
AGE OF BICYCLE DRIVERS
IN TRAFFIC ACCIDENTS
1985

Age	Fatalities Number	Injuries Number	Injuries %
0-5	0	4	3.4
6-13	1	67	57.8
14-19	0	21	18.1
20-24	0	9	7.8
25-34	1	8	6.9
35-44	0	6	5.2
45-54	0	0	0.0
55-64	0	0	0.0
65 And Over	0	0	0.0
Unknown	0	1	0.0
Total	2	116	100

Source: Department of Transportation:Accident Records

IV. GLOSSARY OF TERMS

Reportable Traffic Accident: motor vehicle traffic accident which involves death, injury or accumulated property damage of $400.00 or over.

Fatal Accident: motor vehicle traffic accident in which at least one person was killed.

Injury Accident: motor vehicle accident in which at least one person was injured and no one was killed.

Property Damage Only (PDO) Accident: motor vehicle accident in which no one was killed or injured but there was at least $400.00 in property damage.

Fatality Rate: number of traffic fatalities per 100 million vehicle miles traveled.

Alcohol Involved Accident (1983-1985): at least one driver, pedestrain, or bicycle driver had been drinking in the opinion of the investigating officer.